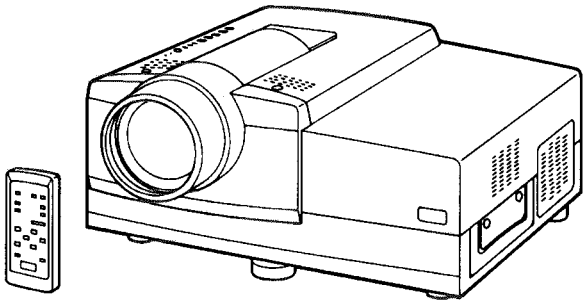
DLA-S10E
DLA-S10EK

JVC

# SERVICE MANUAL

## D-ILA PROJECTOR

# DLA-S10E
# DLA-S10EK



## CONTENTS


- SPECIFICATIONS ..... 2
- SAFETY PRECAUTIONS ..... 1-1
- SERVICE POLICY ..... 1-3
- DIFFERENCE LIST ..... 1-3
- SPECIFIC SERVICE INSTRUCTIONS ..... 1-4
- SERVICE ADJUSTMENTS ..... 1-13
- STANDARD CIRCUIT DIAGRAM ..... 2-1 ~
- PARTS LIST ..... 3-1 ~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# SPECIFICATIONS

## ■GENERAL

| | |
|---|---|
| **Type** | D-ILA PROJECTOR |
| **Dimensions** | 42.5 cm × 24.6 cm × 41.6 cm |
| **(W×H×D)** | (W : excludes protruding parts) |
| **Mass** | 14.9kg |
| **Power requirements** | AC 200V – 240V 50/60Hz |
| **Power Consumption** | 4A (200VAC) [Stand-by mode : 7W] |
| **Operating temperature** | +5℃ – +35℃ |
| **Operating humidity** | 20% – 80% (no-condensation) |
| **Storage temperature** | -10℃ – +60℃ |
| **Storage humidity** | 20% – 80% (no-condensation) |
| **Remote control unit** | **RM-M10SG** |
| **operation** | Distance : 10m |
| | Angle: Horizontal = ±50° , Vertical = ±15° |
| **Mass** | 90g (includes dry cell battery) |
| **Accessories** | Remote control unit (RM-M10G)×1 |
| | Dry cell battery (size : UM-4/AAA/R03)×2 |
| | PC Cable (D-sub 3-row 15pin : 2m)×1 |
| | Signal adapter (for Macintosh)×1 |
| | Audio cable(φ3.5mm stereo : 3m)×1 |
| | AV cable (RCA pin plug : 1.5m)×1 |
| | BNC-RCA plug adapter×1 |
| | Power code (2-pin : 2.5m)×1 **[E]** |
| | Power code (3-pin UK type : 2.5m)×1 **[EK]** |

## ■OPITICS

| | |
|---|---|
| **Image projection** | 3 D-ILA devices ・ 1 Lens ・ |
| **system** | 3 primary-color shutters system |
| **D-ILA device** | 0.9-inch(2.3cm) [H1365×V1024 pixels] ×3 |
| | ＊measured diagonally |
| | [Total : 4,193,280 pixels] |
| **Projection lens** | 1× electrical zoom lens |
| **Screen size** | 40-inch (101cm) [min.] – |
| | 200-inch (508cm) [max.] |
| | ＊measured diagonally with aspect ratio 4:3 |
| **Projection distance** | 76cm – 437cm |
| **Light lamp** | Xenon lamp 400W |
| **Projection angle** | Vertical : max. +7° |
| | Horizontal : max. 3° (±1.5° ) |

## ■ELECTRIC

| | |
|---|---|
| **Color system** | NTSC3.58 / NTSC4.43 / PAL / SECAM |
| | (Automatic / Manual) |
| **Resolution** | **Video input (4:3)** : horizontal 1000TV lines |
| | **RGB input** : H1365×V1024 dots |
| | (S-XGA full resolution) |
| **Contrast ratio** | 250 : 1 |
| **Scanning frequency** | Horizontal : 15kHz – 82kHz |
| | Vertical : 50Hz – 78Hz |
| **Audio power output** | 1W + 1W (8Ω) : stereo |
| **Speakers** | 6×3cm 8Ω oval type ×2 |
| **Fuse** | ⚠QMF51D2-6R3J1 (6.3A) |

## ■INPUT CONNECTORS

| | |
|---|---|
| **AV IN** | select VIDEO・Y/C・Y/PB(B-Y)/PR(R-Y) |
| VIDEO | Composite video signal |
| | BNC connector×1 |
| | 1Vp-p 75Ω negative sync. |
| Y / C | Luminance/Chroma separate video signal |
| | mini DIN 4-pin×1 |
| | **Y** : 1Vp-p 75Ω negative sync. |
| | **C** : 0.286Vp-p(burst) 75Ω [NTSC] |
| | 0.3Vp-p(burst) 75Ω [PAL] |
| Y・PB/B-Y・PR/R-Y | Hi-vision base-band signal / |
| | Color-differential component signal |
| | BNC connector×3 |
| Y | 1Vp-p 75Ω 3-value sync. / negative sync. |
| PB / B-Y | ±0.35Vp-p 75Ω / 0.7Vp-p 75Ω |
| PR / R-Y | ±0.35Vp-p 75Ω / 0.7Vp-p 75Ω |
| AUDIO | RCA pin jack×2 (L[mono] / R) |
| | 500mVrms high impedance (over 47kΩ) |
| **COMPUTER** | select COMPUTER IN-1 / 2 |
| **COMPUTER IN-1** | |
| PC | Analog RGB signal |
| | mini D-sub 15-pin×1 |
| | **R** : 0.7Vp-p 75Ω |
| | **G** : 0.7Vp-p 75Ω |
| | **B** : 0.7Vp-p 75Ω |
| | **Sync. on G** : 1Vp-p 75Ω negative |
| | **Sync.(H/Cs・V)** : 3 – 5Vp-p high impedance |
| | ＊Sync. mode : automatic selection |
| AUDIO | φ3.5mm stereo mini-jack×1 |
| | 500mVrms high impedance (over 47kΩ) |
| **COMPUTER IN-2** | |
| | Analog RGB signal / |
| | Hi-vision base-band (RGB) signal / |
| | Color-differential component signal / |
| | External sync. signal |
| | BNC connector×5 |
| R | 0.7Vp-p 75Ω |
| G | 0.7Vp-p 75Ω |
| B | 0.7Vp-p 75Ω |
| Sync. on G | 1Vp-p 75Ω negative |
| H / Cs (HD) | 3 – 5Vp-p high impedance positive/negative |
| V (VD) | 3 – 5Vp-p high impedance positive/negative |
| | ＊Sync. mode : automatic selection |
| AUDIO | φ3.5mm stereo mini-jack×1 |
| | 500mVrms high impedance (over 47kΩ) |

## ■OUTPUT CONNECTORS

| | |
|---|---|
| **COMPUTER OUT** | Analog RGB signal |
| | mini D-sub 15-pin×1 |
| | **R** : 0.7Vp-p 75Ω |
| | **G** : 0.7Vp-p 75Ω |
| | **B** : 0.7Vp-p 75Ω |
| | **Sync. on G** : 1Vp-p 75Ω negative |
| | **Sync.(H/Cs・V)** : TTL level positive / negative |
| | ＊COMPUTER line output (same for input) |
| **AUDIO OUT** | φ3.5mm stereo mini-jack×1 |
| | 0–500mVrms high impedance (over 47kΩ) |
| | ＊Audio line output : variable output |
| | (connecting = muting speaker output) |

## ■CONTROL CONNECTORS

| | |
|---|---|
| **RS-232C** | D-sub 9-pin×1 |
| **REMOTE** | φ3.5mm mini-jack×1 |

*Design & specification are subject to change without notice.*

# SAFETY PRECAUTIONS [DLA-S10E]

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

4. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⏚) side GND and EARTH : (⏚) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.

5. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).

6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.

7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.

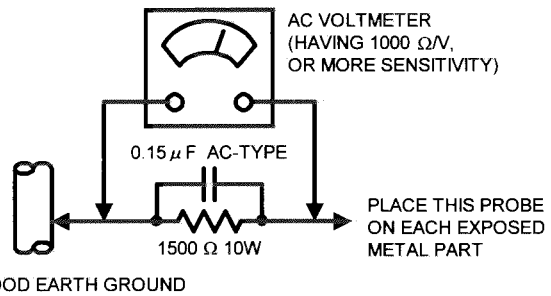
8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

9. **Isolation Check**
   **(Safety for Electrical Shock Hazard)**
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screw heads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

   (1) **Dielectric Strength Test**
   The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second.
   (. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
   This method of test requires a test equipment not generally found in the service trade.

   (2) **Leakage Current Check**
   Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
   However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

   ● **Alternate Check Method**
   Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
   However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



# SAFETY PRECAUTIONS [DLA-S10EK]

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessary be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List of Service Manual may cause shock, fire, or other hazards.

4. The leads in the products are routed and dressed with ties, clamps, tubing□s, barriers and the like to be separated from live parts, high temperature parts, moving parts and / or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.

# WARNING

1. The equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

## ■Warning and caution labels

Labels advising of warning and caution are affixed on and in various locations of the product. Take careful notice of these during service and inspection.

| | |
|---|---|
| ⚠ WARNING | Risk of lethal or otherwise serious personal injury. |
| ⚠ CAUTION | Risk of personal injury and damage to the product. |

| Class | Pictorial | Label advisory | Location |
|---|---|---|---|
| ⚠WARNING | Hot, breakable | This projector lamp emits high heat and contains high-pressure during use. If touched, the lamp (bulb) may rupture and burns may result. Before attempting to replace the lamp, remove the power cord plug from the outlet and wait for the lamp (bulb) to cool (at least one hour). Then proceed to replace the lamp. | Bottom chassis |
| ⚠WARNING | High voltage | Never open any cover on the projector except the lamp and filter covers. Dangerous electrical voltage inside the projector. | Bottom chassis |
| ⚠CAUTION | Hot, shock hazard | Do not insert foreign objects into the ventilation holes as this can result in fire or electrical hazards. Do not block the ventilation holes as this may cause the internal temperature to rize and possibly result fire. When the inside of the unit requires cleaning, consult your nearest JVC dealer or service center. | Side of top cover |
| ⚠CAUTION | High brightness | Never look into the lens while the projector is on. There is danger of eye damage. | Top cover |
| ⚠CAUTION | High voltage | Turn off before opening this lamp cover. See user' s manual for replacing the lamp. Replace with same type (DLA-G10-LAMP) lamp rated 400W, DC15.5V. | Bottom chassis |
| ⚠CAUTION | Hot | Caution, high temperature | Lamp assembly |

## ■Additional cautionary items

※High voltage of about 35kV is applied for lighting the lamp. During adjustments and other work with the cover removed, extreme care is needed to avoid electric shock.

※Use care to avoid touching the fan or safety switch terminals during work with the cover removed.

※Select a stable, horizontal work site to prevent dropping the product and components.

※Use the power cord and interface cable supplied with the product.

**Before starting work, be sure to also check the safety notices contained in the instruction manual.**

# SERVICE POLICY

**The following service policy is being utilized.**

| Item | Part number | Service method |
|---|---|---|
| ANALOG PWB ASS'Y | SXA-1002A | Replace (module) |
| DPC PWB ASS'Y | SXA-1201A | Replace (module) |
| DD PWB ASS'Y | SXA-1301A | Replace (module) |
| R DRIVE PWB ASS'Y | SXA-3001A | Replace (module) |
| G DRIVE PWB ASS'Y | SXA-3101A | Replace (module) |
| B DRIVE PWB ASS'Y | SXA-3201A | Replace (module) |
| REMOTE CONTROL SENSOR PWB ASS'Y | SXA-8001A | Replace parts |
| MAIN POWER PWB ASS'Y | SXA-9002B | Replace parts |
| LAMP POWER PWB ASS'Y | SXA-9102B | Replace parts |
| IGNITER PWB ASS'Y | SXA-9301B | Replace parts |
| FAN POWER PWB ASS'Y | SXA-9201B | Replace parts |
| MAIN LINE FILTER PWB ASS'Y | SXA-9502B | Replace parts |
| SUB LINE FILTER PWB ASS'Y | SXA-9512B | Replace parts |
| STAND-BY MODULE | SXA-0P021B | Replace (module) |
| MAIN DRIVE MODULE | SXA-0P002B | Replace (module) |
| ACTIVE FILTER MODULE | SXA-0P003B | Replace (module) |
| OPTICAL BLOCK ASS'Y | S10-OPSA | Replace (module) |
| LAMP UNIT ASS'Y | G10-LAMP-SU | Replace (module) |

# DIFFERENCE LIST

**This model is based on the DLA-G10U, with the principal differing points as follows.**

| Item | DLA-S10E / DLA-S10EK | DLA-G10E / DLA-G10EK |
|---|---|---|
| Projection lens : zoom function | Absent (fixed at 1 ×) | Provided (1.5 ×) |
| Projection lens : optical axis shift | Absent | Provided (50% upward shift) |
| Projection distance | 0.76 — 4.36 m | 2.5 — 20 m |
| Projection image size (diagonal) | 36.7 — 200 " | 42(tele) — 521(wide) " |
| Movable foot : stopper | Absent (able to remove from outer side) | Provided |
| Dimensions : depth | 41.6 cm | 37.5 cm |
| Mass | 14.9 kg | 14.8 kg |

# SPECIFIC SERVICE INSTRUCTIONS

## Installation cautions

### ■General

●The product contains 5 internal fans. There is risk of internal overheating if the fan intakes and exits are obstructed. In event the internal temperature increases excessively, a sensor functions to cut off the power. Therefore, when using the product, check that the fan intakes and exits are not blocked by dust and there is adequate free space around the unit to allow ample ventilation.

●Do not stand the unit on its side and avoid horizontal inclination of more than ±30 degrees.

### ■Ceiling suspension

An optional ceiling bracket is available for bearing the weight of the product. Read the bracket instructions and perform work accordingly.

# Lamp

## ■Important general cautions

●⚠ The xenon lamp emits high intensity white, ultraviolet and infrared light.
Do not look directly at the light during service. Also, do not touch the lamp directly as it presents a burn hazard.

●⚠ The lamp is filled with high-pressure xenon gas. Use ample care when handling. Particularly avoid impacts to the sapphire glass.

## ■Replacement cautions

● After replacing the lamp, be sure to release the pressurized gas of the old lamp by the method described below and discard it according to local codes pertaining to industrial waste.

The lamp is comprised of the following materials.

**Outer** : PC (outside), UP (inside), brass (insert nut)
**Heat sink** : Aluminum, phosphor bronze (clip)
**Lamp** : Ceramics (exterior) silver (reflecting mirror), sapphire glass, glass, tungsten (internal electrode), cobalt (external electrode), molybdenum (electrode supporter)
**Others** : Iron (screws, net), brass (lamp assembly screws, electrode leads), polyslider (washers for lamp assembly screws), stainless steel (handle, glass securing springs), copper (Lamp assembly connecting electrodes)

### ●Releasing internal gas

The internal gas is released by cutting the glass bead at the rear of the lamp. Since this can fly off from the pressure and pose a hazard, protection is recommended to avoid injury.

**◆Procedure**

1. Place the lamp assembly on a stable work surface (**Fig. 1**) .
2. Set wire cutters in place to cut the bead, but do not cut yet (**Fig. 2**) .
3. Cover the lamp and wire cutters with a cloth (**Fig. 3**) .
4. Hold the cloth in place to prevent flying off from the pressure, and cut the bead (**Fig. 4**) .
5. Inspect that the gas has been released (**Fig. 5**) .

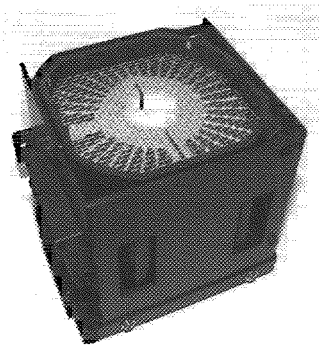


**Fig 1**

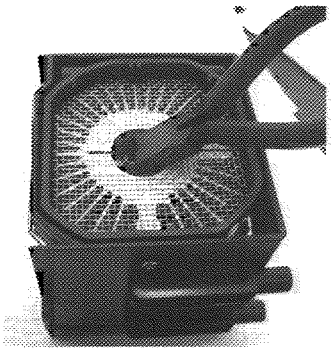


**Fig. 2**

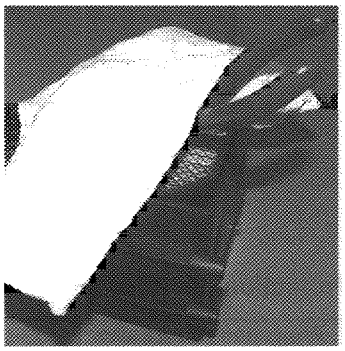


**Fig. 3**

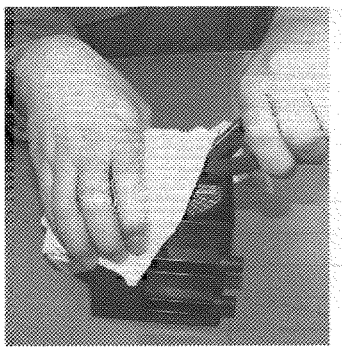


**Fig. 4**

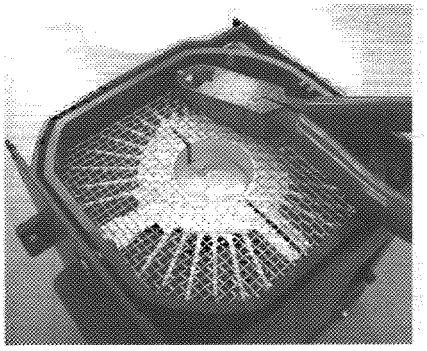
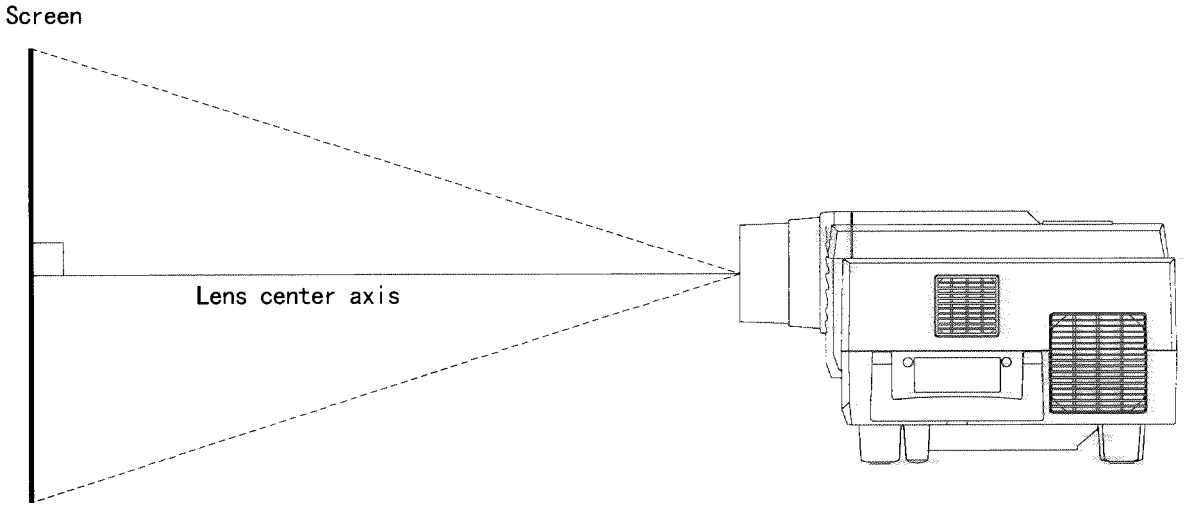


**Fig. 5**

# Projection distance and screen size

- When setting the screen, position it vertically with respect to an extension of the lens center line. The extension of the lens center line is the vertical center of the projected image. Also position the screen at right angles with the lens center axis (so that projection is perpendicular to the screen).
- The projection lens is fixed at 1:1 (short focus).
- The usable projection distance (focus obtainable) is 0.76 m to 4.36 m.
- If distortion occurs at the minimum or maximum projection distance, a slightly forward or rearward projection distance is recommended.
- When setting the screen, use the 4:3 aspect ratio. (This provides a horizontal range reference for using the 16:9 ratio.)
- The diagonal screen size at 16:9 is about 91.8 % compared at 4:3. The numerical values are approximate and simply for reference.
- If there are direct lights from the sun or the illumination, it makes the image whiten. Screen the light with a curtain.
- Keystone distortion due to tilt cannot be compensated.
- The projection distance and screen size relationship is approximate and for reference only. Projection lens tolerances and other factors can affect the actual picture size.

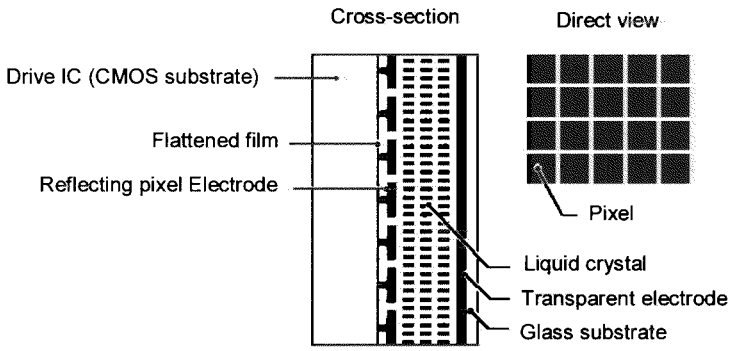



## ■Projection distance and image size relationship

| Projection picture size (diagonal) | Projected distance | |
|---|---|---|
| | 4:3 aspect ratio screen | 16:9 aspect ratio screen |
| 36.7" (93cm) | --------- | 76cm |
| 40" (101cm) | 76cm | 83cm |
| 50" (127cm) | 96cm | 105cm |
| 60" (152cm) | 116cm | 127cm |
| 70" (177cm) | 136cm | 149cm |
| 80" (203cm) | 156cm | 172cm |
| 90" (228cm) | 176cm | 194cm |
| 100" (254cm) | 197cm | 216cm |
| 110" (279cm) | 217cm | 238cm |
| 120" (304cm) | 237cm | 260cm |
| 130" (330cm) | 257cm | 282cm |
| 140" (355cm) | 277cm | 304cm |
| 150" (381cm) | 297cm | 326cm |
| 160" (406cm) | 318cm | 348cm |
| 170" (431cm) | 338cm | 370cm |
| 180" (457cm) | 358cm | 392cm |
| 190" (482cm) | 378cm | 414cm |
| 200" (508cm) | 398cm | 436cm |

# D-ILA construction and properties

**< D-ILA construction >**



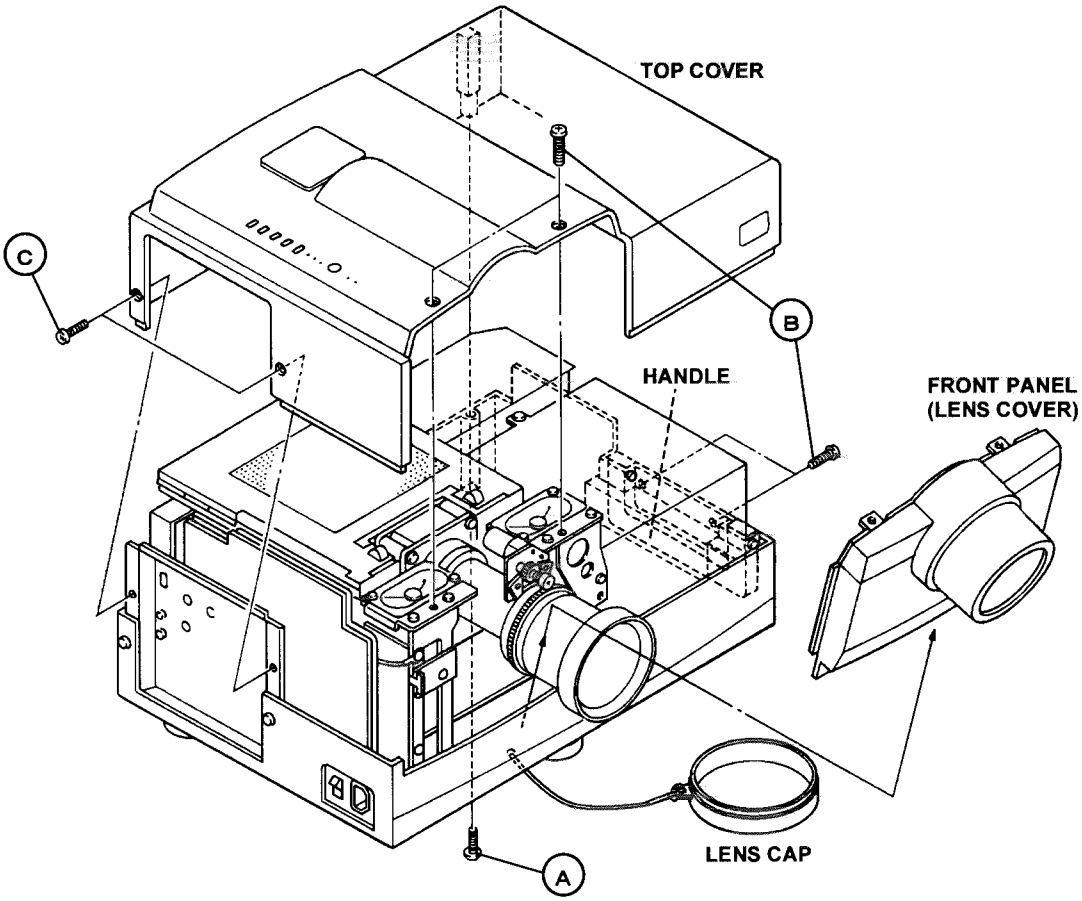

| Item | Description |
|---|---|
| Resolution (Pixels) | 1365 (H) × 1024 (V) |
| Contrast ratio | 1000 : 1 |
| Picture elements (pixels) | Pitch : Horizontal: 13.5 $\mu$ m, vertical: 13.5 $\mu$ m<br>Aspect ratio : 4:3<br>Diagonal : 0.907 inch |

- Aperture efficiency of reflecting type pixel is greater than 93 %.
- Vertical liquid crystal arrangement provided high 1000 : 1 contrast ratio

# DISASSEMBLY PROCEDURE

**∗Confirm the power cord in unplugged from the AC outlet before proceeding.**

**∗The lamp remains quite hot after power off. Allow sufficient time to cool before starting work.**




## ■ TOP COVER

1. Remove 1 screw [A].
2. Remove 4 screws [B] and 2 screws [C].
3. Grasp left and right sides of the TOP COVER, raise and take out it.

## ■ FRONT PANEL (LENS COVER)

● Take out the TOP COVER.

1. Tilt the FRONT PANEL outward and raise it carefully to take out it.

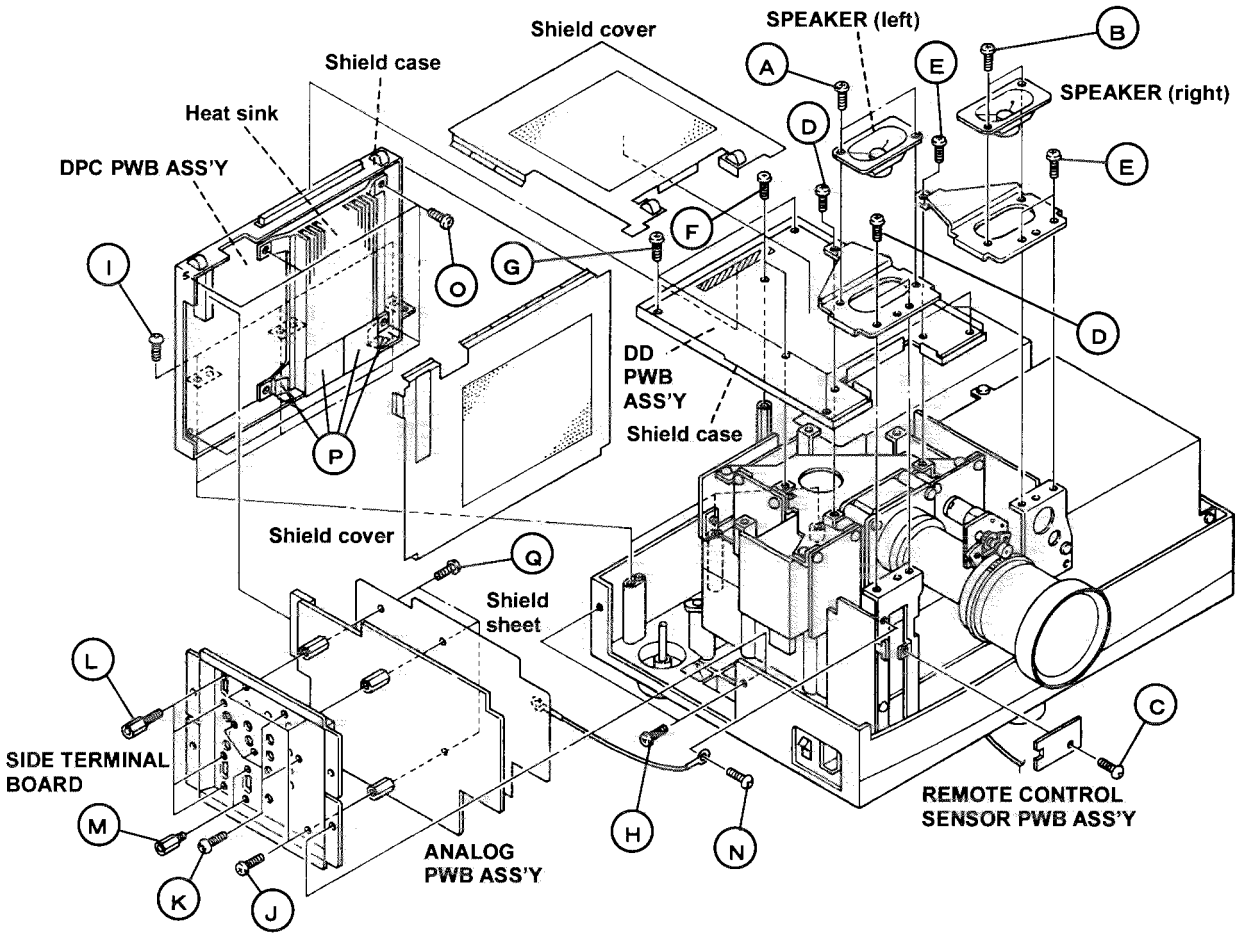
※ Use care not to impart strong shock to the lens.

## ■ HANDLE

● Take out the TOP COVER.

1. Raise and take out the HANDLE.

※ The handle shaft is easily dislodged, use care not to misplace it.




## ■ SPEAKERs

● Take out the TOP COVER.

1. Remove 2 screws (left :[A], right :[B]).
2. Disconnect the + and – wires (receptacles) from 2 locations and take out the SPEAKERs (left and right).

## ■ REMOTE CONTROL SENSOR PWB ASS'Y

● Take out the TOP COVER.
● Take out the FRONT PANEL.

1. Remove 1 screw [C].
2. Disconnect connector J, shift the REMOTE CONTROL SENSOR PWB ASS'Y toward the right and take out it.

## ■ DD PWB ASS'Y

● Take out the TOP COVER.
● Take out the FRONT PANEL.

1. Remove 3 screws [D] and 3 screws [E], then take out the left and right speaker sections (speaker and bracket).
2. Take out the shield cover.
3. Remove 2 screws [F].
4. Disconnect connectors 00R and 00B.
5. Disconnect connector 501.
6. Disconnect connector 00G.
7. Remove 4 screws [G] and take out the shield case.
8. Disconnect connectors A and 0PD, then take out the DD PWB ASS'Y.

## ■ SIDE TERMINAL BOARD

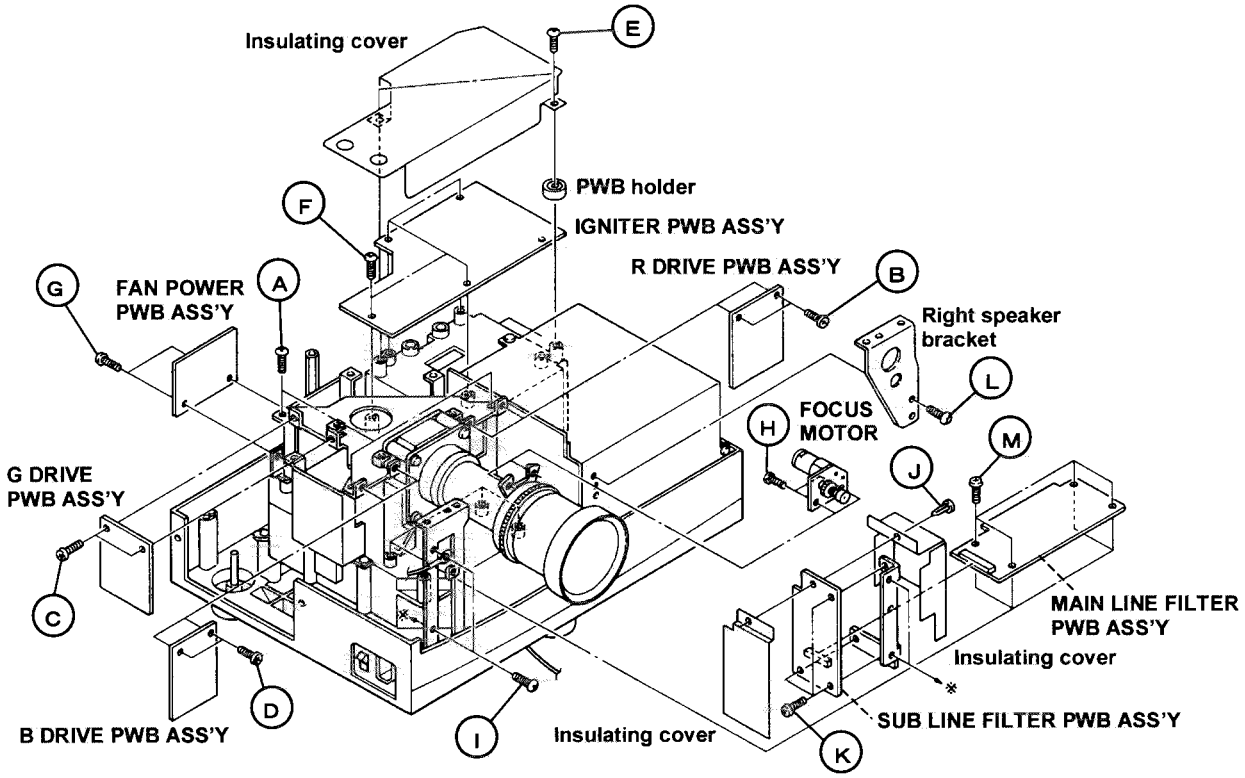
● Take out the TOP COVER.
● Take out the FRONT PANEL.
● Take out the DD PWB ASS'Y.

1. Remove 2 screws [H] and 3 screws [I].
2. Together, lift up and take out the ANALOG PWB ASS'Y, DPC PWB ASS'Y and SIDE TERMINAL BOARD.
3. Remove 3 screws [J] and 4 screws [K].
4. Remove 4 hex bolts [L] and 2 hex bolts [M], then take out the SIDE TERMINAL BOARD.

## ■ ANALOG PWB ASS'Y and DPC PWB ASS'Y

● Take out the TOP COVER.
● Take out the FRONT PANEL.
● Take out the DD PWB ASS'Y.
● Take out the SIDE TERMINAL BOARD.

1. Remove 1 screw [N].
2. Disconnect connector 001 (separate the ANALOG and DPC PWB ASS'Ys).
3. Take out the shield cover of DPC PWB ASS'Y.
4. Remove 6 screws [O].
5. Take off 4 shield seals [P], and take out the DPC PWB ASS'Y shield case and heat sink.
6. Disconnect connector 00A and take out the DPC PWB ASS'Y.
7. Remove 3 screws [Q] and take out the shield sheet.
8. Disconnect connectors B, D, E, F, G, J and K, then take out the ANALOG PWB ASS'Y.




## ■ R / G / B DRIVE PWB ASS'Ys

- Take out the TOP COVER.
- Take out the FRONT PANEL.
- Take out the DD PWB ASS'Y.

1. Remove 3 screws [A] (fix with D-ILA shield wire) .
2. Remove 2 screws (R DRIVE :[B], G DRIVE :[C], B DRIVE :[D]).
3. Slide both ends of the D-ILA device connector towards the flat wire to release the lock.
4. Disconnect the flat wire from the connector and the R (G, B) DRIVE PWB ASS'Y.

※ Note the flat wire is easily damaged. Use care when disconnecting.

## ■ IGNITER PWB ASS'Y

- Take out the TOP COVER.
- Take out the FRONT PANEL.
- Take out the DD PWB ASS'Y.

1. Remove 2 screws [E] and take out the insulating (transparent) cover together with the PWB holder.
2. Remove 4 screws [F].
3. Remove connecting screws (power supply input) PI and MI.
4. Disconnect connectors 901 and VH.
5. Remove 2 lamp connecting plugs (PO and MO) and take out the IGNITER PWB ASS'Y.

## ■ FAN POWER PWB ASS'Y

- Take out the TOP COVER.
- Take out the FRONT PANEL.
- Take out the DD PWB ASS'Y.
- Take out the DPC PWB ASS'Y (with ANALOG PWB ASS'Y and SIDE TERMINAL BOARD).

1. Remove 2 screws [G].
2. Disconnect connectors 104, 105, 107, 108, 109 and 110, then the FAN POWER PWB ASS'Y.

## ■ FOCUS MOTOR

- Take out the TOP COVER.
- Take out the FRONT PANEL.

1. Use a precision screwdriver and remove 2 screws [H].
2. Disconnect connector D and take out the FOCUS MOTOR.

## ■ SUB LINE FILTER PWB ASS'Y

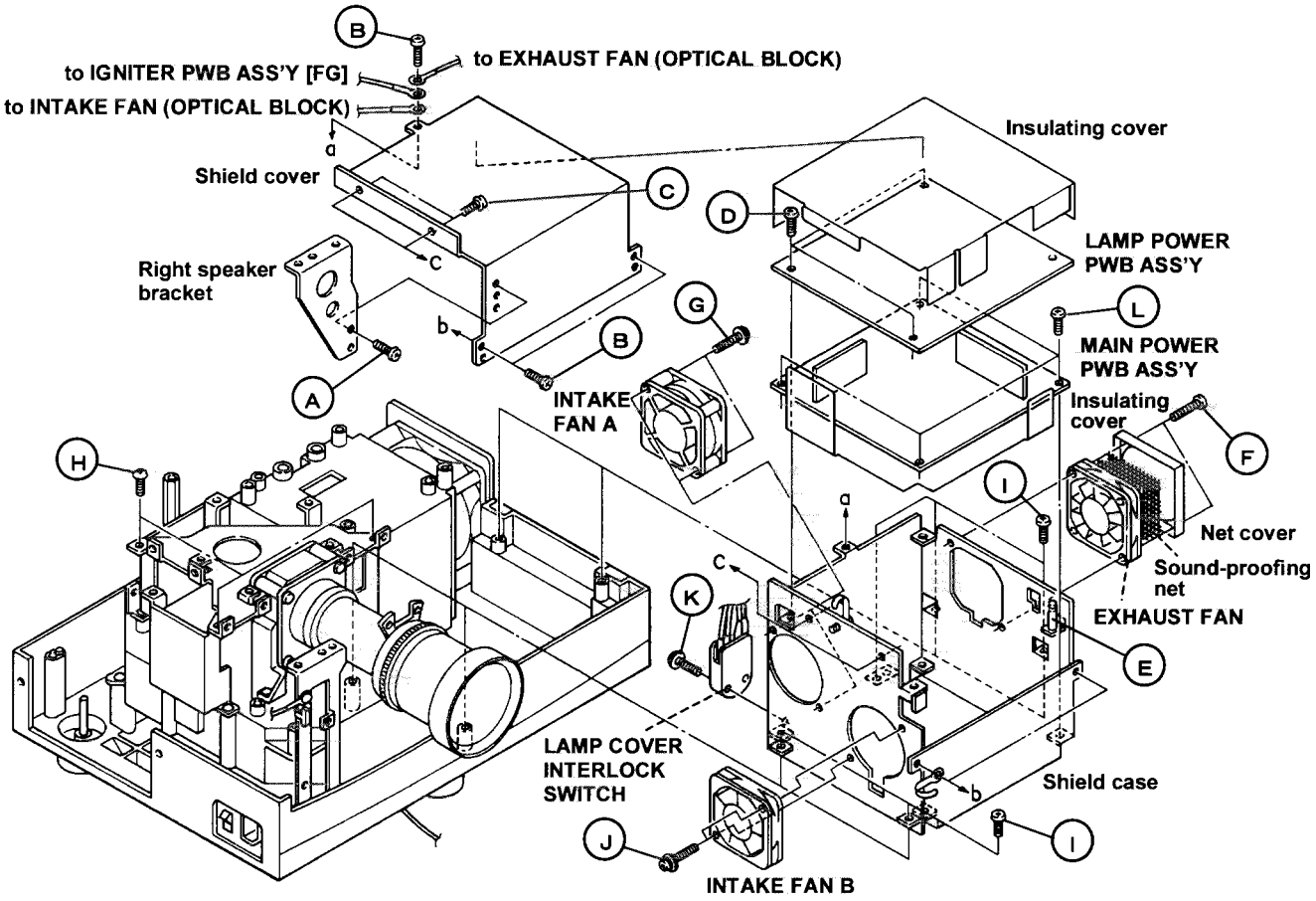
- Take out the TOP COVER.
- Take out the FRONT PANEL.
- Take out the DD PWB ASS'Y.
- Take out the ANALOG PWB ASS'Y (with DPC PWB ASS'Y and SIDE TERMINAL BOARD).

1. Disconnect connector PW6, and remove 2 screws [I] (with 1 earth wire), then extend the sub line filter section.
2. Remove 1 rivet [J] and take out the insulating (transparent) covers from the respective parts and soldered sides of the PWB ASS'Y.
3. Remove 3 screws [K] and take out the bracket.
4. Disconnect connectors PW1 and PW2, then take out the SUB LINE FILTER PWB ASS'Y.

## ■ MAIN LINE FILTER PWB ASS'Y

- Take out the TOP COVER.
- Take out the FRONT PANEL.
- Take out the DD PWB ASS'Y.
- Take out the ANALOG PWB ASS'Y (with DPC PWB ASS'Y and SIDE TERMINAL BOARD).
- Take out the SUB LINE FILTER PWB ASS'Y.

1. Remove 3 screws [A] and shift the RGB drive section (R/G/B DRIVE PWB ASS'Ys and bracket) towards the right.
2. Remove 1 screw [L] and take out the right speaker bracket.
3. Remove 4 screws [M].
4. Disconnect connectors PW3, PW4, PW5 and PW7, and remove connecting screw FG, then take out the MAIN LINE FILTER PWB ASS'Y.




## ■ LAMP POWER PWB ASS'Y

- Take out the TOP COVER.
- Take out the FRONT PANEL.
- Take out the DD PWB ASS'Y.

1. Remove 1 screw [A] and take out the right speaker bracket.
2. Remove 3 screws [B] (with 1 wire clamp at front side and 3 earth wires at top side).
3. Remove 2 screws [C] and take out the shield cover.
4. Lift up and take out the insulating (transparent) cover.
5. Remove 3 screws [D] and disengage 1 boss [E].
6. Disconnect connectors PW10, 901, 203 and VH, and remove 2 IGNITER PWB ASS'Y wire screws PO and MO, then take out the LAMP POWER PWB ASS'Y.

## ■ MAIN POWER PWB ASS'Y

- Take out the TOP COVER.
- Take out the FRONT PANEL.
- Take out the DD PWB ASS'Y.
- Take out the LAMP POWER PWB ASS'Y.
- Take out the EXHAUST FAN.
- Take out the INTAKE FANs A and B.

1. Remove 4 screws [L].
2. Disconnect connectors PW5, 100, 101, 102, 103, 106, 110 and 115.
3. Lift up and take out the MAIN POWER PWB ASS'Y (includes 3 modules).

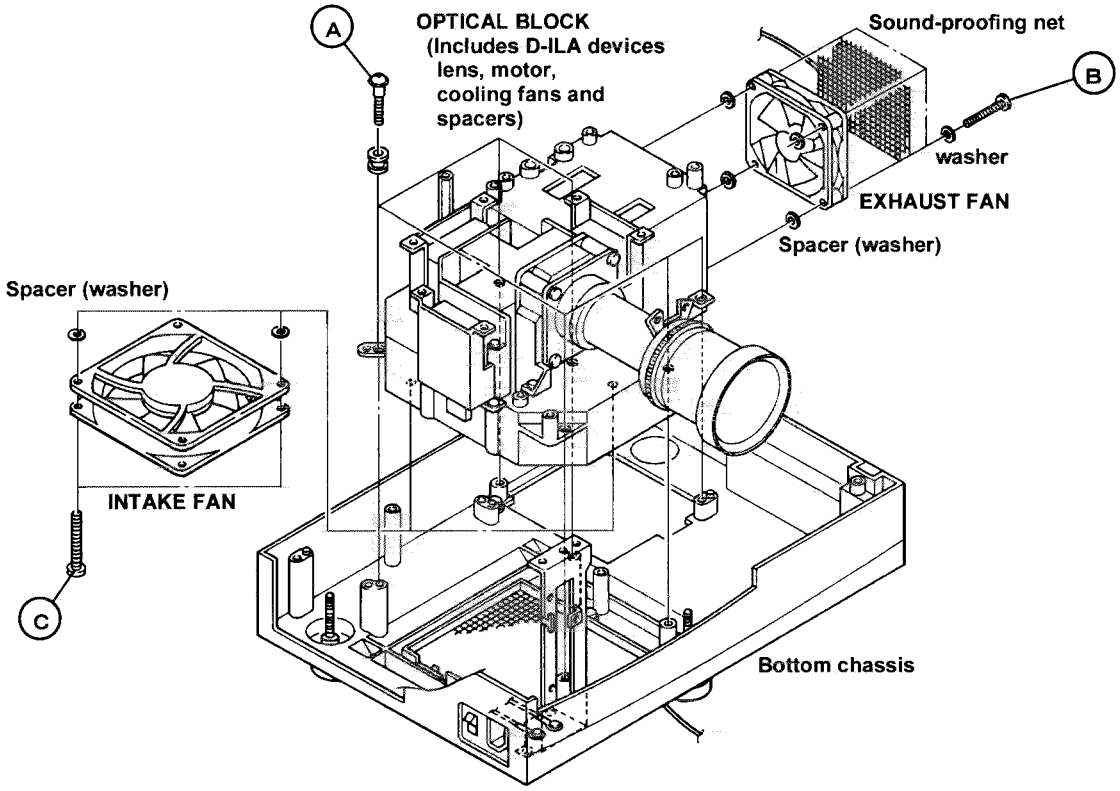
## ■ COOLING FANs (for POWER SECTION) and LAMP COVER INTERLOCK SWITCH

- Take out the TOP COVER.
- Take out the FRONT PANEL.
- Take out the DD PWB ASS'Y.
- Take out the LAMP POWER PWB ASS'Y.

1. Remove 2 screws [F].
2. Disconnect connector 106 and remove the EXHAUST FAN.
3. Remove 2 screws [G].
4. Disconnect connector 109, and take out the INTAKE FAN A with sound-proofing net and net cover.
5. Remove 3 screws [H] and shift the RGB drive section toward the rear-right.
6. Remove 5 screws [I].
7. Take out the wire clamp and shield case.

* Use care not to damage the R D-ILA device flat wire, when lifting and installing the shield case.

8. Remove 2 screws [J].
9. Disconnect connector 105 and take out the INTAKE FAN B.
10. Remove 1 screw [K].
11. Disconnect connectors PW4 and PW10, then take out the LAMP COVER INTERLOCK SWITCH.




## ■ OPTICAL BLOCK

- Take out the TOP COVER.
- Take out the FRONT PANEL.
- Take out the DD PWB ASS'Y.
- Take out the SIDE TERMINAL BOARD, ANALOG and DPC PWB ASS'Ys.
- Take out the RGB drive section.
- Take out the IGNITER PWB ASS'Y.
- Take out the FAN POWER PWB ASS'Y.
- Take out the left and right speaker sections.
- Take out the FOCUS MOTOR.
- Take out the MAIN and SUB LINE FILTER PWB ASS'Ys.
- Take out the power block (power shield case).

1. Remove 6 screws [A].
2. Lift up and take out the OPTICAL BLOCK.

※ The OPTICAL BLOCK contains prism mirrors and other components that are sensitive to shock. With the lens installed, the overall weight is shifted toward one side. Use care not to drop or subject to physical shock.

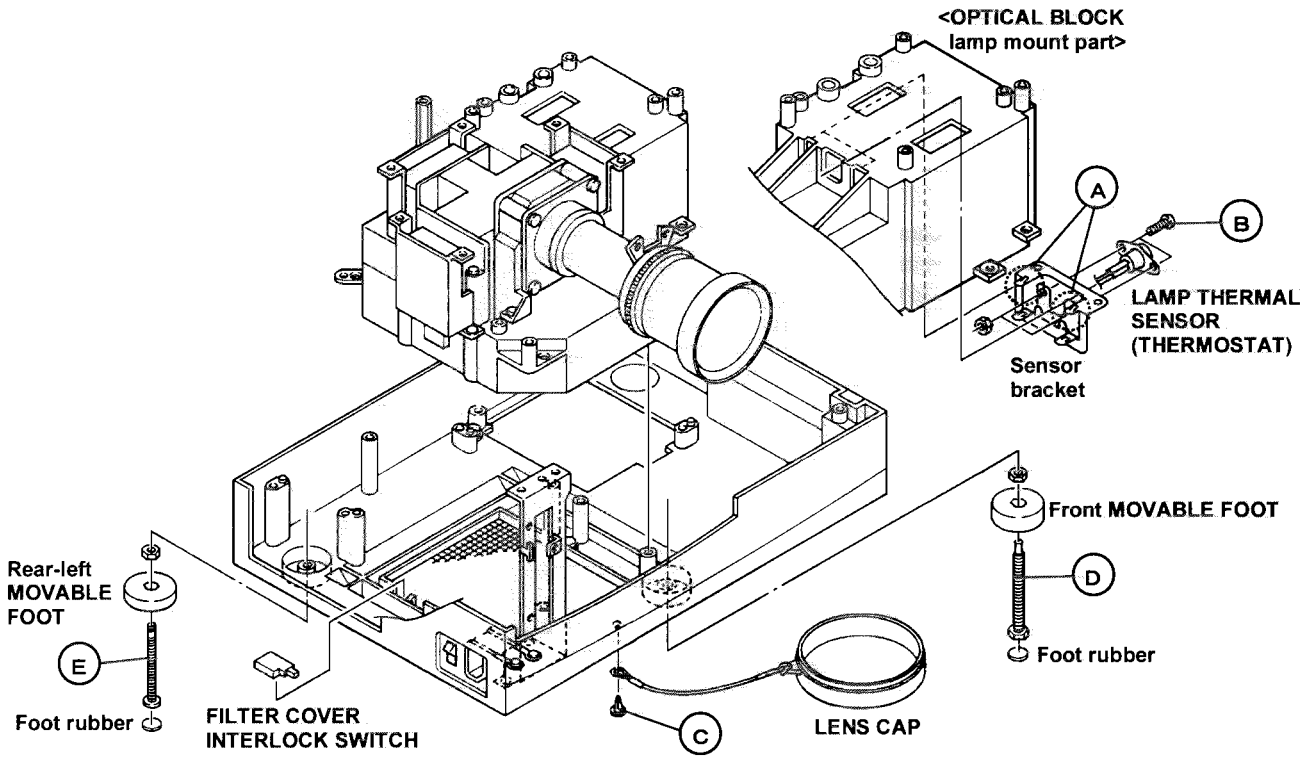
※ Spacers are easily damaged when taking out the OPTICAL BLOCK. Be sure to replace spacers when severely damaged.

※ The OPTICAL BLOCK does dot include the LAMP ASS'Y.

## ■ COOLING FANs (for OPTICAL BLOCK)

- Take out the TOP COVER.
- Take out the FRONT PANEL.
- Take out the DD PWB ASS'Y.
- Take out the SIDE TERMINAL BOARD, ANALOG and DPC PWB ASS'Ys.
- Take out the RGB drive section.
- Take out the IGNITER PWB ASS'Y.
- Take out the FAN POWER PWB ASS'Y.
- Take out the left and right speaker sections.
- Take out the FOCUS MOTOR.
- Take out the MAIN and SUB LINE FILTER PWB ASS'Ys.
- Take out the power block (power shield case).
- Take out the OPTICAL BLOCK.

1. Remove 4 screws [B] (with washers and spacers).
2. Disconnect connector 107 and take out the EXHAUST FAN together with the sound-proofing net.
3. Remove 2 screws [C] (with washers).
4. Disconnect connector 104 and take out the INTAKE FAN.




## ■ LAMP THERMAL SENSOR (THERMOSTAT)

- Take out the TOP COVER.
- Take out the FRONT PANEL.
- Take out the DD PWB ASS'Y.
- Take out the IGNITER PWB ASS'Y.

1. Take out the LAMP ASS'Y.
2. Disengage 2 hooks [A] and take out the sensor bracket.
3. While holding the nut fixed, remove 2 screws [B].
4. Disconnect the interim connector and take out the LAMP THERMAL SENSOR.

## ■ LENS CAP

- Take out the TOP COVER.
- Take out the FRONT PANEL.
- Take out the DD PWB ASS'Y.
- Take out the SIDE TERMINAL BOARD, ANALOG and DPC PWB ASS'Ys.
- Take out the RGB drive section.
- Take out the IGNITER PWB ASS'Y.
- Take out the FAN POWER PWB ASS'Y.
- Take out the left and right speaker sections.
- Take out the FOCUS MOTOR.
- Take out the MAIN and SUB LINE FILTER PWB ASS'Ys.
- Take out the power block (power shield case).
- Take out the OPTICAL BLOCK.

1. Remove 1 rivet [C] that holds the string attached to the LENS CAP and take out the lens cap together with the string.

※ After taking out the LENS CAP, the string can be taking out from the LENS CAP.

## ■ FILTER COVER INTERLOCK SWITCH

- Take out the TOP COVER.
- Take out the FRONT PANEL.
- Take out the DD PWB ASS'Y.
- Take out the SIDE TERMINAL BOARD, ANALOG and DPC PWB ASS'Ys.
- Take out the RGB drive section.
- Take out the IGNITER PWB ASS'Y.
- Take out the FAN POWER PWB ASS'Y.
- Take out the left and right speaker sections.
- Take out the FOCUS MOTOR.
- Take out the MAIN and SUB LINE FILTER PWB ASS'Ys.
- Take out the power block (power shield case).
- Take out the OPTICAL BLOCK.

1. Disengage the hook and take out the FILTER COVER INTER-LOCK SWITCH.

## ■ MOVABLE FEET

1. Take off the foot rubber.
2. Remove 1 bolt (front :[D], rear-left :[E]) and take out the MOVABLE FOOT.

※ The MOVABLE FEET can be taking out while the outer covers remain installed.

# SERVICE ADJUSTMENTS

## Before starting adjustment

1. Data back up is required before adjustments.
2. Adjustment items utilize a personal computer. Refer to the instruction manual of the adjustment software regarding software handling and setup.
3. This instruction is for PSA Control Program Ver. 2.0.0. Use the latest version program.
4. Allow the equipment and test instruments adequate time (at least 30 minutes) to warm-up.
5. Confirm the set is properly connected to the specified AC power source.
6. Use care not to disturb internal controls and parts not specifically mentioned.
7. Unless specifically mentioned in the adjustment steps, do not change any data.
8. Refer to the standard schematic diagram for testpoint locations.

## Instruments and tools

DC voltmeter (digital voltmeter)
Oscilloscope
NTSC signal generator (composite and S output) : Grey scale (0IRE – 100IRE)
HDTV signal generator (Y, PB, PR outputs) : Grey scale (0IRE – 100IRE)
VGA signal generator: Following flat patterns : 100% white, 60% white, 0% black,
Following flat patterns for each RGB colors and white:
100%, 93%, 87%, 80%, 70%, 63%, 57%, 50%, 43%, 37%, 30%, 20%, 13%, 7%, 0%
Grey scale / G scale : 15steps or more (above 15 signal levels must be included)
Screen
Darkroom (illumination less than 0.03 lux)
Lightmeter: Minolta T-1
Personal computer

| | |
|---|---|
| Operating system | Windows 95 |
| Memory | More than 16 Mbytes |
| Hard disk free space | More than 5 Mbytes |
| RS-232C interface | At least 1 port |
| Display resolution | Minimum: 800 × 600 pixels<br>Recommended: 1024 × 768 pixels or better |
| Display colors | Minimum: 8 bits/pixel<br>Recommended: 16 bits/pixel or better |
| Input devices | Keyboard and mouse |

D-ILA PSA control software
RS-232C 9pin NULL-MODEM (cross) cable
Photodiode or Phototransistor/CDS with amplifier

# Required adjustment by replacing signal PWB ASS'Ys or Optical block

**Replacement of the ANALOG PWB ASS'Y, DPC PWB ASS'Y, DD PWB ASS'Y, or Optical block required below adjustment.**

The indication of (confirm) means after the replacement, confirm this item and adjust if necessary.

## ■ ANALOG PWB ASS'Y

**=Data back up before replacing the PWB ASS'Y.** (Use Download of the PSA software)

**=Replacing the PWB ASS'Y.**

1. **Data input**

**=Data restore after replacing the PWB ASS'Y.** (Use Upload of the PSA software)

2. **COM DC adjust**
3. **NTSC timing and pedestal**
4. **NTSC RGB contrast**
5. **HDTV RGB contrast**
10. **White shading** (confirm)
11. **8 bars adjustment** (confirm)

## ■ DPC PWB ASS'Y

**=Data back up before replacing the PWB ASS'Y.** (Use Download of the PSA software)

6. **A/D converter aperture**
7. **Sub-bright and sub contrast**
8. **Gamma adjustment** (confirm)
10. **White shading** (confirm)
11. **8 bars adjustment** (confirm)

## ■ DD PWB ASS'Y

**=Data back up before replacing the PWB ASS'Y.** (Use Download of the PSA software)

2. **COM DC adjust**
8. **Gamma adjustment**
9. **D-ILA clock phase adjustment**
10. **White shading**
11. **8 bars adjustment**

## ■ Optical block

**=Data back up before replacing the block.** (Use Download of the PSA software)

2. **COM DC adjust**
8. **Gamma adjustment**
9. **D-ILA clock phase adjustment**
10. **White shading**
11. **8 bars adjustment**

# Adjustment procedure

## Electrical adjustment

### 1 . Data input

Required if the ANALOG PWB ASS'Y is replaced.
Instrument: Signal generator

(1) Set the equipment to the standby mode (signal not needed).
(2) Start the PSA software and open Service Menu [Area Data] , click [DOM. US] for NTSC model or [E. EK] for PAL model, then click [Transmit all] .
(By performing this, area data are transmitted for all circle-marked items of the table.)

Input source table

| | Line No. | L00 | L01 | L02 | L03 | L04 |
|---|---|---|---|---|---|---|
| Area No. | Signal name | Y/C | VIDEO | Y-Pb-Pr | COMPUTER1 | COMPUTER 2 |
| A00 | NTCS | O | O | O | | O |
| A01 | PAL/SECAM | O | O | O | | O |
| A03 | EDTV 2 | | | O | | O |
| A04 | HDTV | | | O | | O |
| A05 | PC98 | | | | O | O |
| A06 | VGA1 | | | | O | O |
| A07 | VGA3 | | | | O | O |
| A08 | MAC13 | | | | O | O |
| A09 | VGA VESA | | | | O | O |
| A10 | SVGA1 | | | | O | O |
| A11 | SVGA2 | | | | O | O |
| A12 | MAC16 | | | | O | O |
| A13 | XGA1 | | | | O | O |
| A14 | XGA2 | | | | O | O |
| A15 | MAC19 | | | | O | O |
| A16 | MAC21 | | | | O | O |
| A17 | SXGA1 | | | | O | O |
| A18 | SXGA2 | | | | O | O |
| A19 | SXGA3 | | | | O | O |

(3) Supply any signal and set the equipment to the operate mode (switch on) then project it.
(4) Click [Power] and confirm the display turned [Off] to [On] .
(5) Select the file A00_L00.acd by [File(F)] [Open(O)] , then click [Open(O)] .
(Save the data "Cancel", Load continue "OK", Transmit "Cancel")
(6) Open Service Menu [DDIC] , then click [Transmit all] . (use data A00_L00.acd)
(7) Open Service Menu [SGRAM] , then click [transmit] . (use data A00_L00.acd)
(8) Open Service Menu [DPC] , Change the Table No. to 0, then click [ADR Transmit] and [IMD Transmit] .
Click [ADR Transmit] and [IMD Transmit] for the Table No. 1, 2 and 3.
(use data A00_L00.acd)
**Important: Do not click Transmit all.**
(9) Open Service Menu [EVR] [ILA] , and then do asking with left click for all vales of this chart and setup as this chart.

| | setup vale |
|---|---|
| COM Voltage R | 120 |
| COM Voltage G | 123 |
| COM Voltage B | 124 |
| OFFSET voltage R | 130 |
| OFFSET voltage G | 130 |
| OFFSET voltage B | 130 |

## 2. COM DC adjust

Required when replacing the ANALOG PWB ASS'Y, DD PWB ASS'Y or optical block.
Instruments: VGA Signal generator
Photodiode or Phototransistor/CDS with amplifier

(1) Project a VGA 50% red signal.
(2) Connect the light output observing device to the oscilloscope and place in front of the lens where the most easy point to observe the flicker.
**Notes: Do not adjust under the lamp that flickers.**
(3) Observe the light volume and after asking Service Menu [EVR] [ILA] [COM Voltage R], adjust to minimize the waveform amplitude with the oscilloscope coupling both of DC and AC.
(4) Similarly, project 50% green and 50% blue signals and respectively adjust [COM Voltage G] [COM Voltage B].
**Notes: Large deviation of this adjustment can cause image flicker. Element burn can occur when out of adjustment.**

## 3. NTSC timing and pedestal

Required when replacing ANALOG PWB ASS'Y.
Instrument: NTSC Signal generator

(1) Apply an NTSC YC separate greyscale signal to the Y/C input terminal.
(2) Open main menu [Set Up], select Y/C of [LINE].
(3) Connect the oscilloscope to ANALOG PWB ASS'Y TP-102 (ground at TP-1E).
(4) Display Service Menu [EVR] [DECOD], click [Pedestal level], [HPOS Timing T] and [HPOS Timing W], then set to 255.
(5) Observe the waveform with the oscilloscope and adjust [HPOS Timing W] to set the blanking W (Fig. 1) to 11 μs.
(6) Adjust [HPOS Timing T] to align the rear edge of the video signal (greyscale) with the front edge of the adjusted blanking W (Fig. 2).
(7) Adjust [Pedestal level] to the blanking to the same level as 0 IRE (Fig. 3).

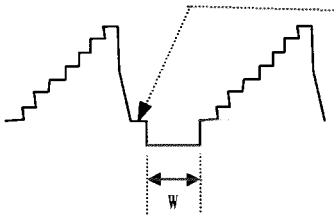


Fig. 1

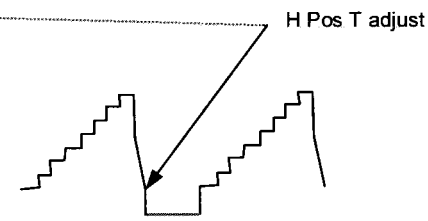


Fig. 2

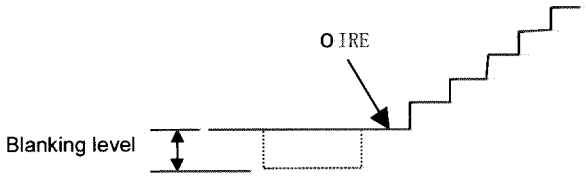


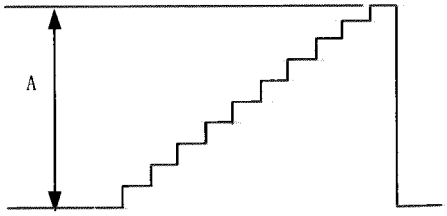
Fig. 3

## 4. NTSC RGB contrast

Required after replacing ANALOG PWB ASS'Y.
Instrument: NTSC signal generator

(1) Apply a NTSC YC separate greyscale signal to the Y/C input terminal.
(2) Set the line to Y/C.
(3) Observe the ANALOG PWB ASS'Y testpoint TP-305 with the oscilloscope. Open Service Menu [EVR] [NTSC], click [G Gain] and set the voltage from 0 to 100 IRE to 0.7Vp-p(level A of Fig.).
**Notes: Adjust the green gain before the adjusting red and blue.**
(4) Observe the ANALOG PWB ASS'Y testpoints indicated below with the oscilloscope. Click the following gain items of the Service Menu [EVR] [NTSC] and set the voltages from 0 to 100 IRE (level A of Fig.).

| | Testpoint | Setting voltage |
|---|---|---|
| G Gain | TP-305 | 0.7Vp-p |
| R Gain | TP-304 | 0.7Vp-p |
| B Gain | TP-306 | 0.7Vp-p |

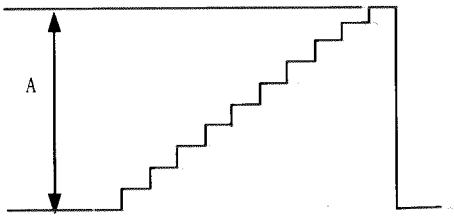



## 5. HDTV contrast

Required after replacing ANALOG PWB ASS'Y.
Instrument: HDTV Signal generator

(1) Apply a HDTV greyscale signal to the Y PB PR terminal.
(2) Set the line to Y PB PR.
(3) Observe the ANALOG PWB ASS'Y testpoint TP-305 with the oscilloscope. Open Service Menu [EVR] [NTSC], click [G Gain] and set the voltage from 0 to 100 IRE to 0.7Vp-p(level A of Fig.).
**Notes: Adjust the green gain before the adjusting red and blue.**
(4) Observe the ANALOG PWB ASS'Y testpoints indicated below with the oscilloscope. Click the following gain items of the Service Menu [EVR] [NTSC] and set the voltages from 0 to 100 IRE (level A of Fig.).

| | Testpoint | Setting voltage |
|---|---|---|
| G Gain | TP-305 | 0.7Vp-p |
| R Gain | TP-304 | 0.7Vp-p |
| B Gain | TP-306 | 0.7Vp-p |



## 6. A/D converter aperture

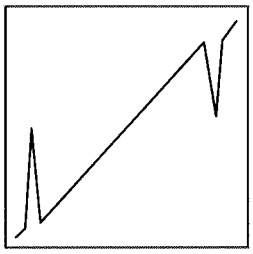
Required after replacing DPC PWB ASS'Y.
This item must be done for DPC PWB ASS'Y without the shield case.
Instruments: VGA Signal generator

(1) Set the Service Menu [Status/Ctrl] [Electric Power] to [On] to supply power to the DPC PWB ASS'Y.
(2) Push the OPERATE button of the set and confirm the OPERATE LED (orange) is lighting.
(3) Observe the following DPC PWB ASS'Y testpoints with the oscilloscope.
(4) Open Service Menu [EVR] [ADCV] . After asking the following items, adjust the following voltages (DC). (Ground is TP-001.)

| | Testpoint | Setting voltage |
|---|---|---|
| ADCV(H)R | TP-302 | 3.6V |
| ADCV(H)G | TP-304 | 3.6V |
| ADCV(H)B | TP-306 | 3.6V |
| ADCV(L)R | TP-301 | 1.6V |
| ADCV(L)G | TP-303 | 1.6V |
| ADCV(L)B | TP-305 | 1.6V |

## 7. Sub-bright and sub-contrast

Required after replacing the DPC PWB ASS'Y.
This item must be done for DPC PWB ASS'Y after installing to the set.
Instrument: VGA Signal generator



(1) Supply VGA greyscale signal and project on screen.
(2) Open Service Menu [Gamma] , [Receive] [G] gamma data.
(3) As shown in the figure, raise the Y Position of the Control Points 1 and lower the Y Position of the Control Points 15 data.
(aprox. 512)
(4) Change Interpolation to Line, then [Transmit] data.
(5) Open Service Menu [EVR] [ILA] , click and make a note of the [OFFSET Voltage R] , [OFFSET Voltage G] and [OFFSET Voltage B] .
(6) Open Service Menu [EVR] [ILA] , set the [OFFSET Voltage R] , [OFFSET Voltage B] to 255.
(7) Open Service Menu [DDIC] and set [GIN] , [DYN] and [LUM] to [Off] (only [GAM] is [On] ).
(8) Open Service Menu [EVR] [BRIGHT] .
(9) Adjust [BRIGHT G] so that the 0 % screen component brightness rise is sharp and maximum brightness.
(10) Open Service Menu [EVR] [CONT] .
(11) Adjust [CONT G] so that the 100 % screen component brightness fall is sharp and darkest.
(12) Return the [Gamma] [G] Y Position of Control Points 1 data to 64 and the Y Position of Control Points 15 data to 960, change Interpolation to Spline and [Transmit] .
(13) Open Service Menu [EVR] [ILA] , return [OFFSET Voltage R] and [OFFSET Voltage B] to the data noted above.
(14) In the same manner as G, adjust the R and B sub brightness and sub contrast.
(15) Open Service Menu [DDIC] and return [GIN] , [DYN] and [LUM] to [On] .

## 8. (1) Gamma adjustment (factory service)

Cannot be adjusted without a darkroom and lightmeter. If not available, do gamma adjustment (field service) of 8. –(2).
Required after replacing DPC PWB ASS'Y, DD PWB ASS'Y or optical block.
Instruments: VGA Signal generator
Lightmeter (Minolta T-1)

(1) Preparation
1) Project some signal.
2) Open Service Menu [DDIC], click [Default], then click [Transmit].
3) Open Service Menu [Gamma] then change interpolation to line.
4) Open Service Menu [DDIC] and set [LUM] to [Off] then Open main menu [Picture] and set [Color Temp] to [Middle].

(2) G MAX luminance measurement
1) Open Service Menu [EVR] [ILA], click and make a note of the [OFFSET Voltage R], [OFFSET Voltage G] and [OFFSET Voltage B].
2) Open Service Menu [EVR] [ILA], then set [OFFSET Voltage R] and [OFFSET Voltage B] to 255.
3) Open Service Menu [DDIC] then click [GIN] and [GAM] and confirm both of them are [On].
4) Project G only of VGA 100 % signal and measure the screen center luminance.
(Set the distance from the projection lens to the lightmeter to approximate 30cm, then don't move those.)
5) Open Service Menu [EVR] [ILA] and adjust [OFFSET Voltage G] to maximum luminance and make a note as **Max. luminance**.

(3) G adjustment target computation
1) From the measured G maximum luminance, compute the 100 to 0 % target adjustment values from the **luminance table**.

**luminance table**

| Input (%) | Control Point | X Position | Signal ratio | YL output (lux ratio) | Target computation formula | Computed value |
|---|---|---|---|---|---|---|
| | 16 | 1023 | | | | |
| 100 | 15 | 960 | 100 | 100.00 | **Max. luminance** × 0.95 | |
| 93 | 14 | 897 | 93 | 85.24 | 100 % luminance computed value × YL output | |
| 87 | 13 | 844 | 87 | 73.61 | ↑ | |
| 80 | 12 | 781 | 80 | 61.21 | ↑ | |
| 70 | 11 | 691 | 70 | 45.63 | ↑ | |
| 63 | 10 | 628 | 63 | 36.19 | ↑ | |
| 57 | 9 | 574 | 57 | 29.04 | ↑ | |
| 50 | 8 | 512 | 50 | 21.76 | ↑ | |
| 43 | 7 | 449 | 43 | 15.62 | ↑ | |
| 37 | 6 | 396 | 37 | 11.22 | ↑ | |
| 30 | 5 | 333 | 30 | 7.07 | ↑ | |
| 20 | 4 | 243 | 20 | 2.90 | ↑ | |
| 13 | 3 | 180 | 13 | 1.12 | ↑ | |
| 7 | 2 | 127 | 9.5 | 0.56 | ↑ | |
| 0 | 1 | 64 | 0 | 0.30 | ↑ | |
| | 0 | 0 | | | | |

(4) G luminance adjustment

- 0 % luminance

1) Supply G only of VGA 0 % black signal.
2) Open Service Menu [EVR] [ILA], click [OFFSET Voltage G], then adjust to the computed value±5%.

- 100 % luminance

1) Supply G only of VGA 100 % signal.
2) Open Service Menu [DDIC] [Gain], click [All 8 Bars], click one number of Green Gain #1 - #8 then adjust [GIN] to the computed value±5%.

- 50 % luminance

1) Supply G only of VGA 50 % signal.
2) Open Service Menu [Gamma], click [G] and [Receive] gamma data.
3) Adjust the Y value at the gamma curve X-axis Control Points 7, 8 and 9 (48 %, 50 % and 57 %) in the same manner to the above computed target value±10%.

**Note: Transmit the data at each Y value adjustment of the screen.**

- 93 % - 7 % luminance

1) In the same manner as 50 %, adjust Control Points 11, 12 and 13 for 80 % and Control Points 4, 5 and 6 for 30 %.
2) Sequentially adjust for other Control Point (1, 2, 3, 10, 14 and 15) for smooth conformance with the gamma curve.
3) Change Interpolation to Spline.
4) Adjust the 93% (Control Points 13, 14 and 15) in the same manner to the above computed target value±5% and smooth conformance with the gamma curve
5) Adjust 80% (Control Points 11, 12 and 13), 57% (Control Points 8, 9 and 10), 43% (Control Points 6, 7 and 8), 30% (Control Points 4, 5 and 6) and 13% (Control Points 2, 3 and 4), in the same manner to the above computed target values and smooth conformance with the gamma curve

- 0 % and 100 % readjust

1) Readjust the 0 % (Control Points 1) and 100 % (Control Points 15) luminance to the computed value±5%.

- final confirmation

1) Sequentially adjust for other Control Point (2, 4, 6, 8, 10, 11 and 13) for smooth conformance with the gamma curve.
2) Supply VGA greyscale signal and confirm normal gradation on the screen.

(5) Data re-input

1) Open Service Menu [EVR] [ILA], then return [OFFSET Voltage R] and [OFFSET Voltage B] to the values noted above.

(6) R and B gamma

1) In the same manner as G, measure max. luminance, compute the target values, adjust the luminance and do the data re-input.
2) Supply VGA greyscale signal and confirm normal gradation and white balance for each signal level.

(7) At the end of adjustment

1) Open Service Menu [DDIC] and return [LUM] to [On].

## 8. (2) Gamma adjustment (field service)

Required after replacing the DPC PWB ASS'Y, DD PWB ASS'Y or optical block
Instrument: VGA Signal generator

(1) Project G only of VGA greyscale signal.
(2) Open Service Menu [Gamma] then select [G] and adjust each Control Point 2 to Control Point 14 for natural gradation at each signal level.
**Note: Transmit the data for each Y Position adjustment of the screen.**
(3) Supply VGA greyscale signal.
(4) Adjust R gamma and B gamma similarly as G gamma for natural white balance at each signal level.
**Note: Transmit the data for each Y Position adjustment of the screen.**

## 9. D-ILA clock phase adjustment

Required after replacing the DD PWB ASS'Y or optical block.

(1) Display onscreen.
(2) Open Service Menu [DDIC] [Pixel] and adjust [DDCDLY] to minimize the ghost.
**Note: Cancel the left side ghost and minimize the right side ghost.**

## 10. White shading

Required after replacing the ANALOG PWB ASS'Y, DPC PWB ASS'Y, DD PWB ASS'Y or optical block
Instruments: VGA Signal generator
Lightmeter (Minolta T-1)

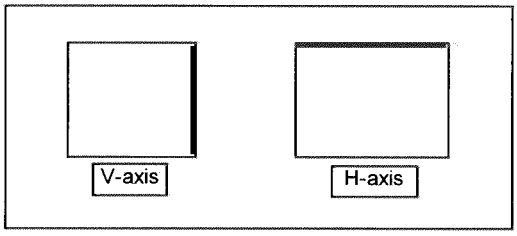
(1) Preparation

1) Supply VGA 60 % white signal.
2) Open Service Menu [Shading], click [LUM], click [R] click [Default] click [Transmit], click [G] click [Default] click [Transmit], click [B] click [Default] click [Transmit]. (Confirm the chart and figure became as Chart 1 and Fig. 1.)
3) Open Service Menu [Shading], click [DYN], click [R] click [Default] click [Transmit], click [G] click [Default] click [Transmit], click [B] click [Default] click [Transmit]. (Confirm the chart and figure became as Chart 1 and Fig. 1.)

**Chart 1**

| V: | Right (Top in fig.) | Center | Left (Bottom in fig.) |
|---|---|---|---|
| X: | 0 | **127** | 255 |
| Y: | **255** | **255** | **255** |
| H: | Right | Center | Left |
| X: | 0 | **170** | 341 |
| Y: | **255** | **255** | **255** |

**Fig. 1**

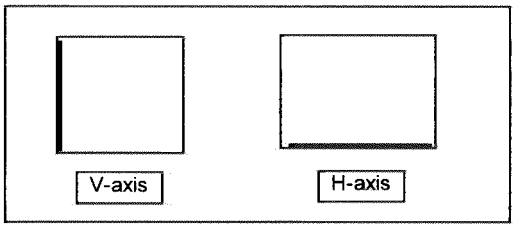



4) Open Service Menu [Shading], click [STC], click [R] click [Default] click [Transmit], click [G] click [Default] click [Transmit], click [B] click [Default] click [Transmit]. (Confirm the chart and figure became as Chart 2 and Fig. 2.)

**Chart 2**

| V: | Right (Top in fig.) | Center | Left (Bottom in fig.) |
|---|---|---|---|
| X: | 0 | **127** | 255 |
| Y: | **0** | **0** | **0** |
| H: | Right | Center | Left |
| X: | 0 | **170** | 341 |
| Y: | **0** | **0** | **0** |

**Fig. 2**




5) Open Service Menu [DDIC] then set [GIN], [GAM] and [DYN] to [On], and set [STC] and [LUM] to [Off].

(2) G adjustment

1) Open Service Menu [Shading], click [DYN] and click [G].
2) Vary the Y: data and interpolation of H-axis as indicated in Fig. 3 and adjust to minimize the horizontal shading on the screen.
**Note: One of the Y: value of Right end, Center or Left end must be 255.**
**Transmit the data at each adjustment.**
3) Vary the Y: data and interpolation of V-axis as indicated in Fig. 3 and adjust to minimize the vertical shading on the screen.
**Note: One of the Y: value of Right end, Center or Left end must be 255.**
**Transmit the data at each adjustment**

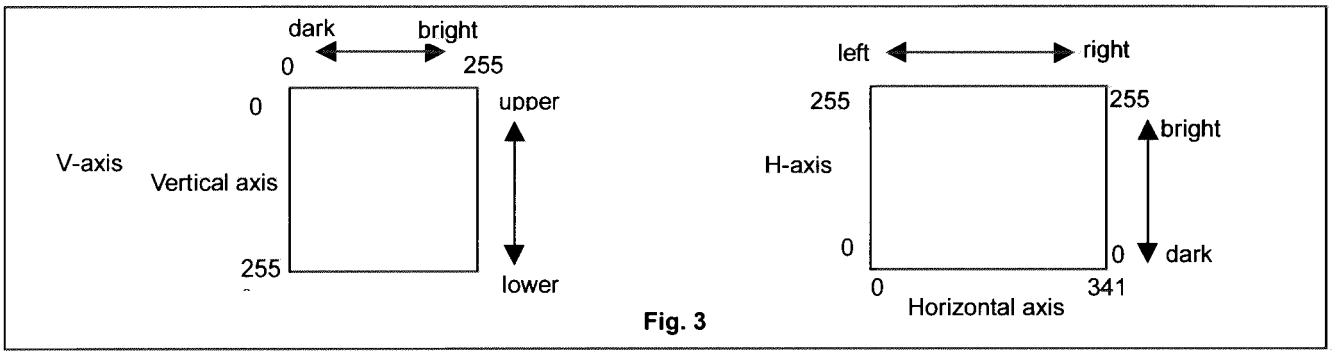



**Fig. 3**

(3) R and B adjustment
1) In the same manner as G, adjust Service Menu [Shading] [DYN] , [R] and [G] .

(4) Screen center luminance adjustment
**Note: This adjustment must be performed If H V-axis center values (H: 170, V: 127) ware adjusted.**
1) Supply G only of VGA 100 % white signal.
2) Open Service Menu [EVR] [ILA] , click and make a note of the [OFFSET Voltage R] , [OFFSET Voltage G] and [OFFSET Voltage B] .
3) Open Service Menu [EVR] [ILA] , then set [OFFSET Voltage R] and [OFFSET Voltage B] to 255.
4) Open Service Menu [DDIC] and measure the screen center luminance both [DYN] [On] and [Off] .
5) Open Service Menu [DDIC] [Gain] , click [All 8 Bars] and one of Green #1 - #8 number display area, adjust [GIN] to almost same luminance both [DYN] [On] and [Off] .
6) Open Service Menu [EVR] [ILA] , then return [OFFSET Voltage R] and [OFFSET Voltage B] to the values noted above.
7) In the same manner as G, adjust R and B.

(5) At the end of adjustment
1) Open Service Menu [DDIC] and return [LUM] to [On] .

## 1 1 . 8 bars adjustment

Required after replacing the ANALOG PWB ASS'Y, DPC PWB ASS'Y, DD PWB ASS'Y or optical block
Instrument: VGA Signal generator

(1) Preparation
1) Adjust the focus to get the best focus on the screen.

(2) Black 8 bars adjustment
1) Supply G only of VGA 0 % signal.
2) Open Service Menu [DDIC] then set [GIN] , [GAM] and [DYN] to [On] ,and set [LUM] to [Off] .
3) Open Service Menu [EVR] [ILA] , click and make a note of the [OFFSET Voltage R] , [OFFSET Voltage G] and [OFFSET Voltage B] .
4) Open Service Menu [EVR] [ILA] , then set [OFFSET Voltage R] and [OFFSET Voltage B] to 255.
5) Open Service Menu [EVR] [ILA] ,adjust [OFFSET Voltage G] for observation of the vertical lines.
6) Open Service Menu [Gamma] [G] , adjust Green Gamma Offset1 - 8 to cancel the vertical lines.
**Note: For observation of the vertical line's correspondence, change the Offset1 value much higher.**

(3) White 8 bars adjustment
1) Supply G only of VGA 80 % signal.
2) Open Service Menu [EVR] [ILA] ,adjust [OFFSET Voltage G] for observation of the vertical lines.
3) Open Service Menu [DDIC] [Gain] , click [Only 1 Bar] , adjust #1 - #8 to cancel the vertical lines.
**Note: For observation of the vertical line's correspondence, change the #1 value much lower.**

(4) R and B adjustment
1) In the same manner as G, adjust R and B.

(5) Data input
1) Open Service Menu [EVR] [ILA] , then return [OFFSET Voltage R] , [OFFSET Voltage G] and [OFFSET Voltage B] to the values noted above.
2) Open Service Menu [DDIC] and return [LUM] to [On] .

# DLA-S10E / DLA-S10EK STANDARD CIRCUIT DIAGRAM

## CONTENS

■ NOTE ON USING CIRCUIT DIAGRAMS ····· 2-2
■ SEMICONDUCTOR SHAPES ····· 2-3
■ TEST POINTS LOCATION ····· 2-4
■ WIRING DIAGRAM ····· 2-5
■ BLOCK DIAGRAM ····· 2-7
■ CIRCUIT DIAGRAMS AND PWB PATTERNS

| PWB's name | PWB ASS'Y No. | diagram | pattern |
|---|---|---|---|
| REMOTE CONTROL SENSOR PWB ASS'Y | SXA-8001A | 2-16 | —— |
| MAIN POWER PWB ASS'Y | SXA-9002B | 2-9 | 2-13 |
| LAMP POWER PWB ASS'Y | SXA-9102B | 2-11 | 2-14 |
| FAN POWER PWB ASS'Y | SXA-9201B | 2-9 | 2-15 |
| IGNITER PWB ASS'Y | SXA-9301B | 2-11 | 2-15 |
| MAIN LINE FILTER PWB ASS'Y | SXA-9502B | 2-9 | 2-16 |
| SUB LINE FILTER PWB ASS'Y | SXA-9512B | 2-9 | 2-16 |

# NOTE ON USING CIRCUIT DIAGRAMS

## 1. SAFETY

The components identified by the ⚠symbol and shading are critical for safety. For continued safety, replace safety critical components only with manufactures recommended parts.

## 2. SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1) Input signal : Color bar signal (VGA : 640 × 480)
(2) Setting positions of each knob / button and variable resistor : Original setting position when shipped
(3) Internal resistance of tester : DC 20 kΩ / V
(4) Oscilloscope sweeping time : H ⇒ 20 μs / div
: V ⇒ 5ms / div
: Others ⇒ Sweeping time is specified
(5) voltage values : All DC voltage values

* Since the voltage values of signal circuit vary to some extent according to adjustment, use them as reference values.

## 3. INDICATION OF PARTS SYMBOL [EXAMPLE]

●In the PW board : R1209 → R209

# 4. INDICATIONS ON THE CIRCUIT DIAGRAM

**(1) Resistors**

●Resistance value

| | |
|---|---|
| No unit | : [Ω] |
| K | : [kΩ] |
| M | : [MΩ] |

●Rated allowable power

| | |
|---|---|
| No indication | : 1/6 [W] |
| Others | : As specified |

●Type

| | |
|---|---|
| No indication | : Carbon resistor |
| OMR | : Oxide metal film resistor |
| MFR | : Metal film resistor |
| MPR | : Metal plate resistor |
| UNFR | : Uninflammable resistor |
| FR | : Fusible resistor |

* Composition resistor 1/2[W] is specified as 1/2S or Comp.

**(2) Capacitors**

●Capacitance value

| | |
|---|---|
| 1 or higher | : [pF] |
| less than 1 | : [μF] |

●Withstand voltage

| | |
|---|---|
| No indication | : DC50 [V] |
| Others | : DC withstand voltage [V] |
| AC indicated | : AC withstand voltage [V] |

※Electrolytic Capacitors [Example]

47/50 : Capacitance value[μF] / withstand voltage[V]

●Type

| | |
|---|---|
| No indication | : Ceramic capacitor |
| MY | : Mylar capacitor |
| MM | : Metalized Mylar capacitor |
| PP | : Polypropylene capacitor |
| MPP | : Metalized polypropylene capacitor |
| MF | : Metalized film capacitor |
| TF | : Tin film capacitor |
| BP | : Bipolar electrolytic capacitor |
| TAN | : Tantalum capacitor |

**(3) Coils**

| | |
|---|---|
| No unit | : [μH] |
| Others | : As specified |

**(4) Power Supply**

: B1 (130V)
: B2 (12V)
: 5V

* Respective voltage values are indicated

**(5) Test Point**

: Test point
: Only test point display

**(6) Connecting Method**

: Connector
: Wrapping or soldering
: Receptacle (On the PWB)
: Receptacle (On the wire)

**(7) Ground Symbol**

⊥ : LIVE side ground
⏚ : ISOLATED (NEUTRAL) side ground [analog circuit]
⏚ : EARTH ground
⏚ : ISOLATED (NEUTRAL) side ground [digital circuit]

# 5. NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED (NEUTRAL) : (⏚) side GND. Therefore, care must be taken for the following points.

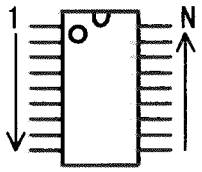
(1) Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED (NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2) Do not short between the LIVE side GND and ISOLATED (NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED (NEUTRAL) side GND at the same time. If the above precaution is not respected, a fuse or any parts will be broken.

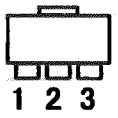
**◇ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**

# SEMICONDUCTOR SHAPES

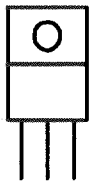
## IC




FA5331M
FA7612CN
UC3843BD1-X
UPC358G-W



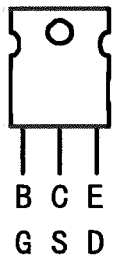

NJM431U-X



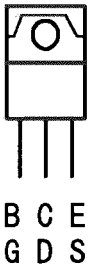
IN E OUT

AN7915F
IFR9630
TA79005S
UPC2412AHF

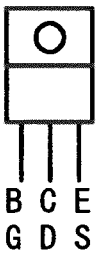
## Transistors



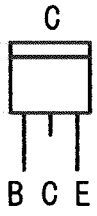

2SK2196



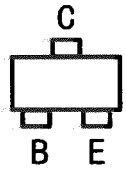

2SK1017MR-01




2SA1471(R)
2SC3751

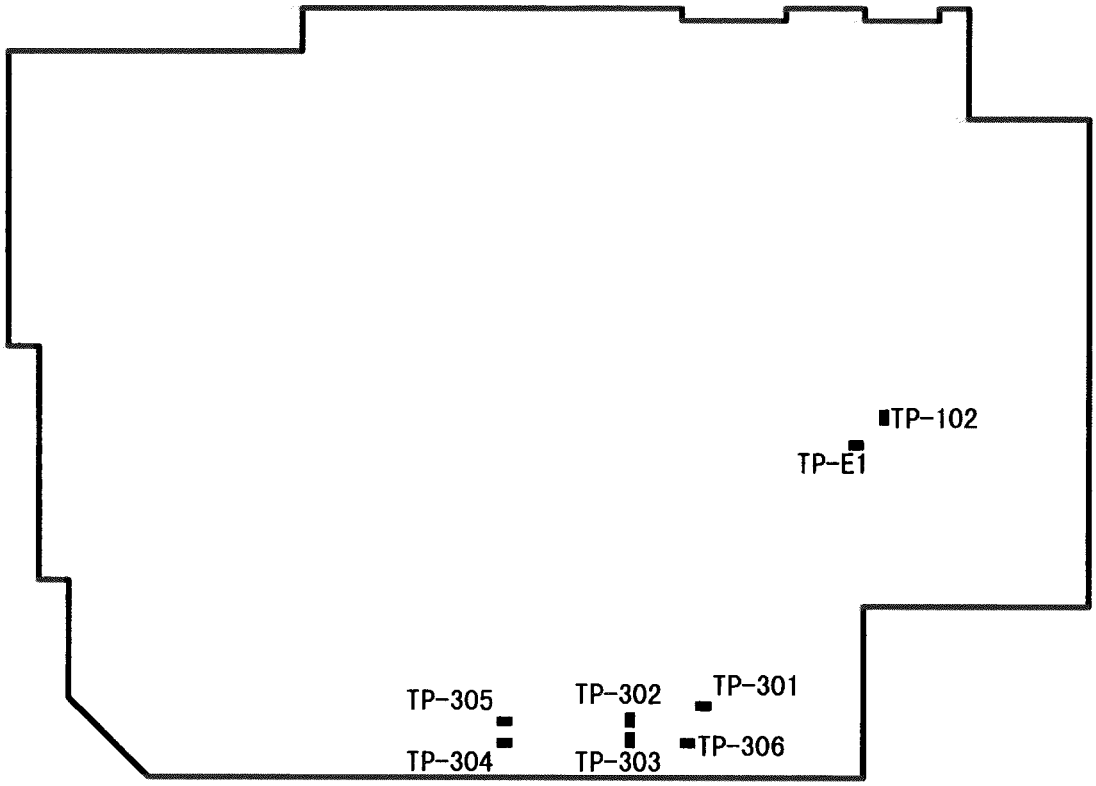



2SA1795-W
2SC4668-W

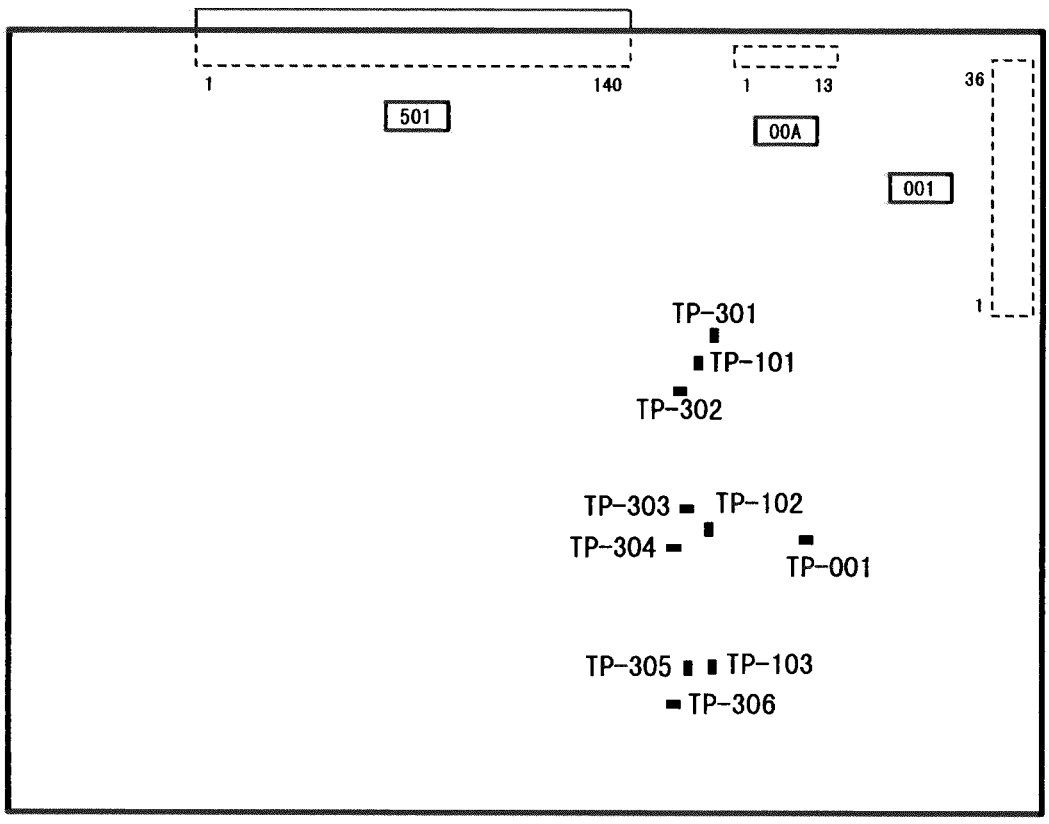



2SA1037AK/QR/-X
2SA1162/YG/-X
2SC1740S/QR/-T
2SC2412K/QR/-X
2SC3751/KLM/
2SC4061K/NP/-X
DTC114EKA-X
DTC123YKA-X
DTC143XKA-X

# TEST POINTS LOCATION

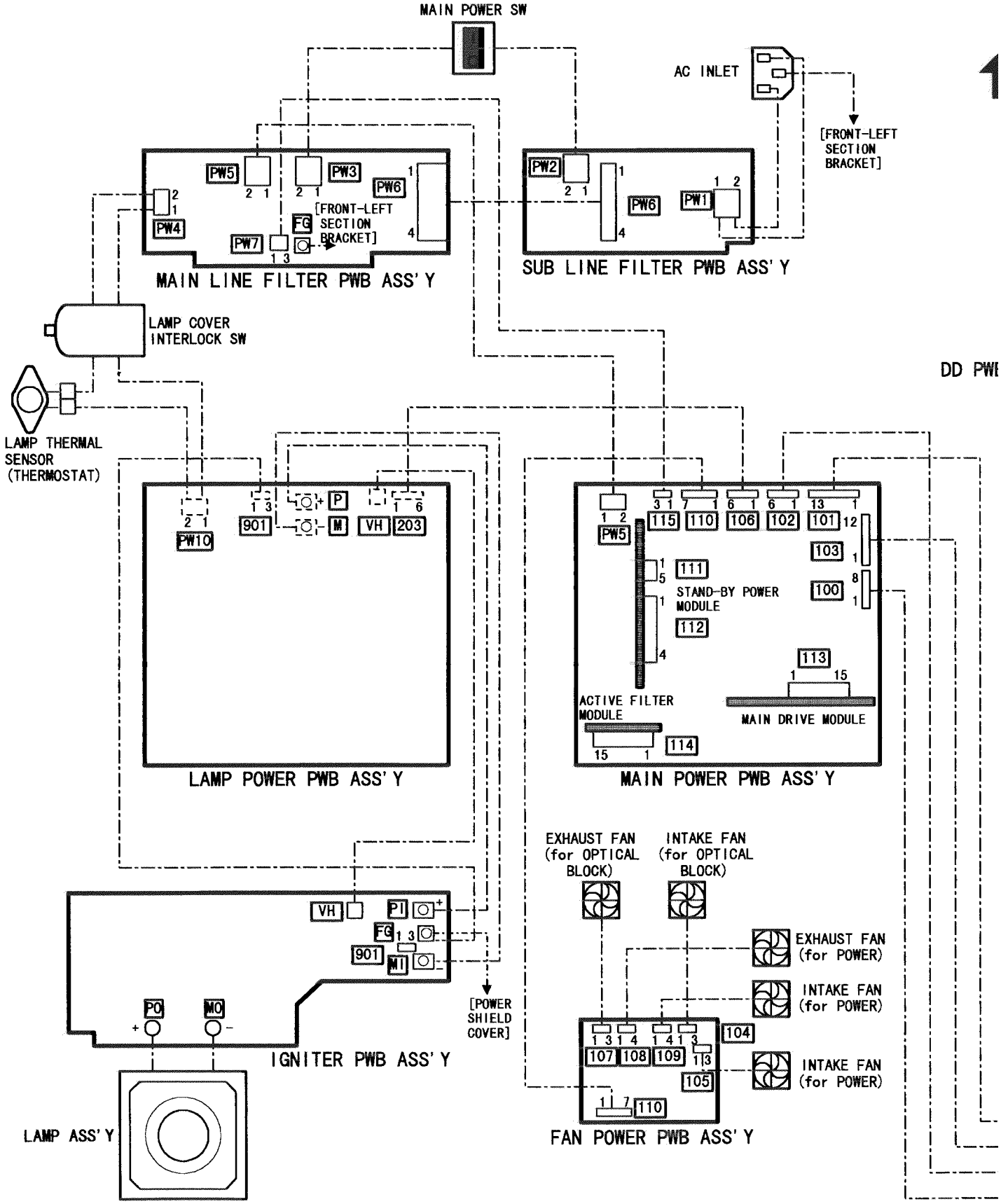


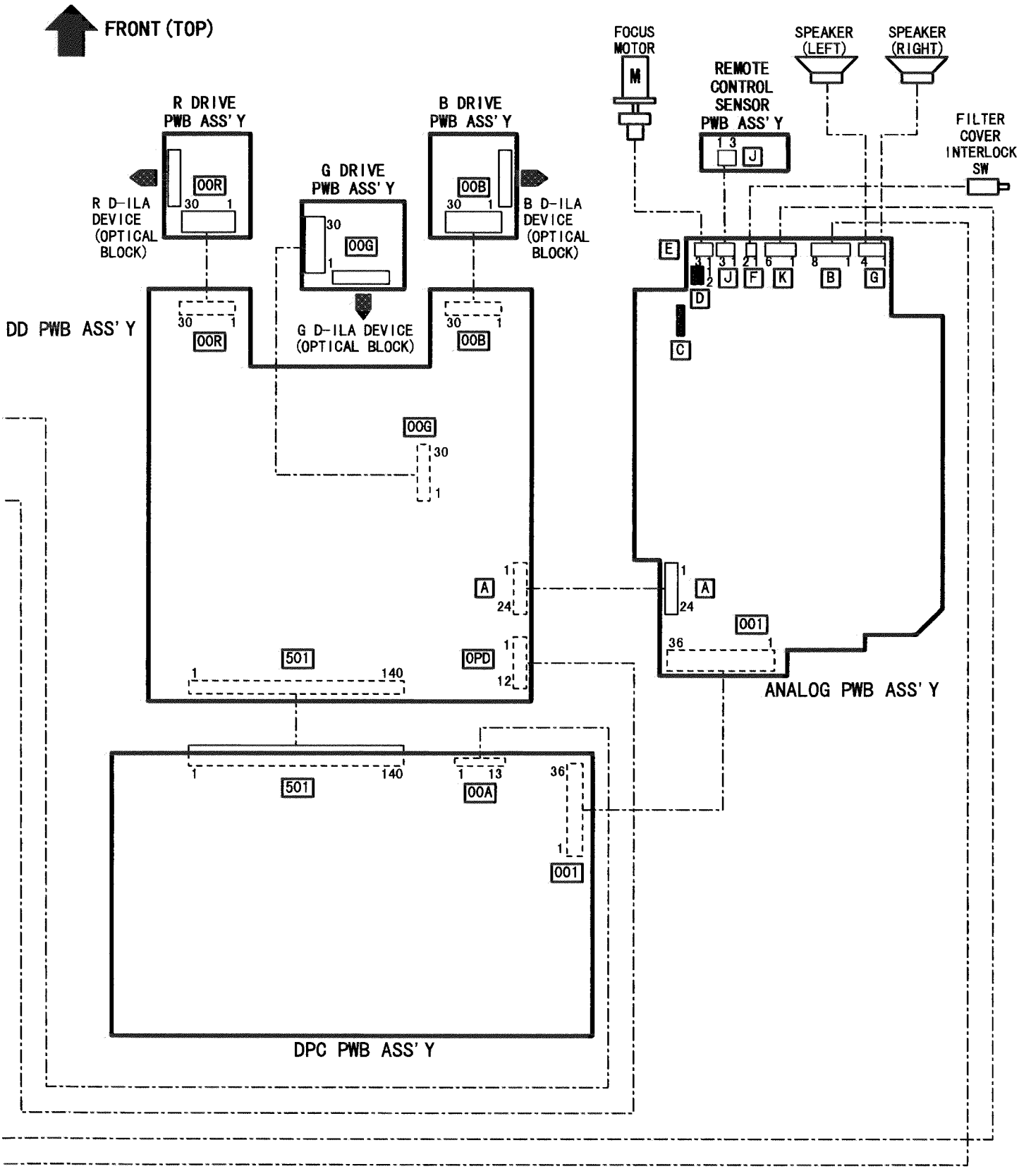

ANALOG PWB ASS'Y (PARTS SIDE)



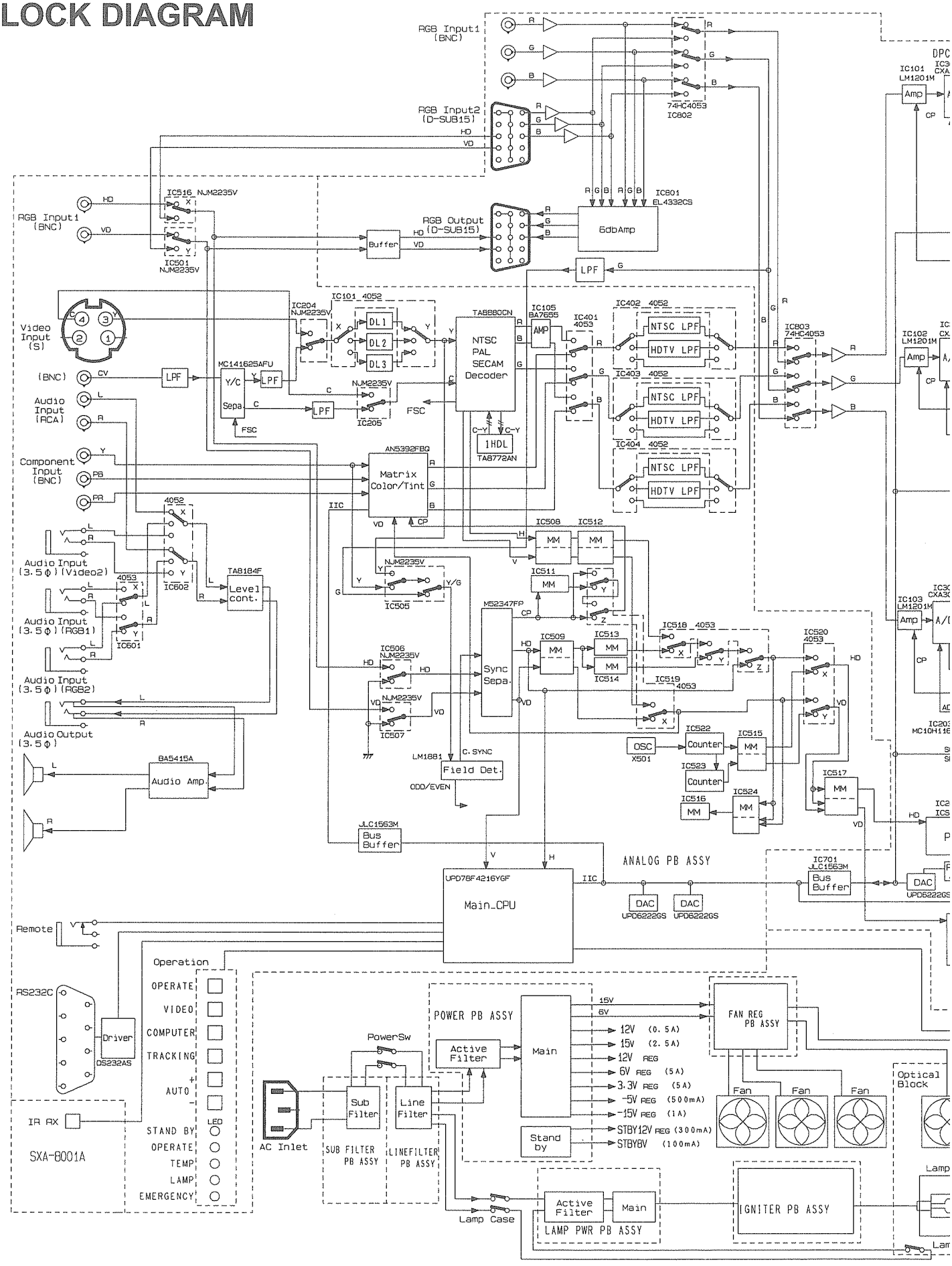

DPC PWB ASS'Y (SOLDERING SIDE)

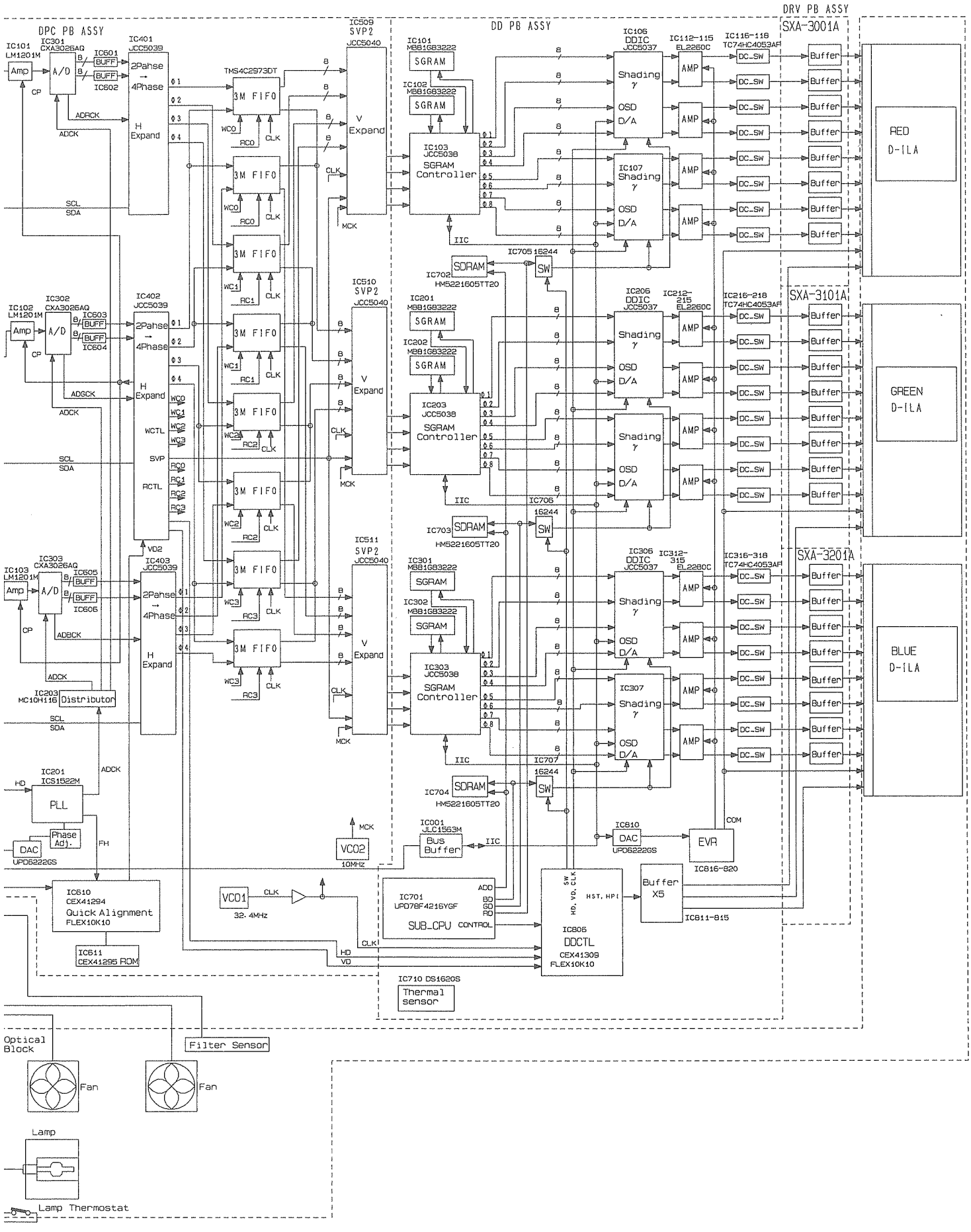
# WIRING DIAGRAM




FRONT (TOP)
FOCUS MOTOR
M
SPEAKER (LEFT)
SPEAKER (RIGHT)
REMOTE CONTROL SENSOR PWB ASS'Y
FILTER COVER INTERLOCK SW
R DRIVE PWB ASS'Y
B DRIVE PWB ASS'Y
G DRIVE PWB ASS'Y
R D-ILA DEVICE (OPTICAL BLOCK)
B D-ILA DEVICE (OPTICAL BLOCK)
G D-ILA DEVICE (OPTICAL BLOCK)
DD PWB ASS'Y
00R
00G
00B
E
D
C
J
F
K
B
G
A
0PD
501
001
00A
ANALOG PWB ASS'Y
DPC PWB ASS'Y

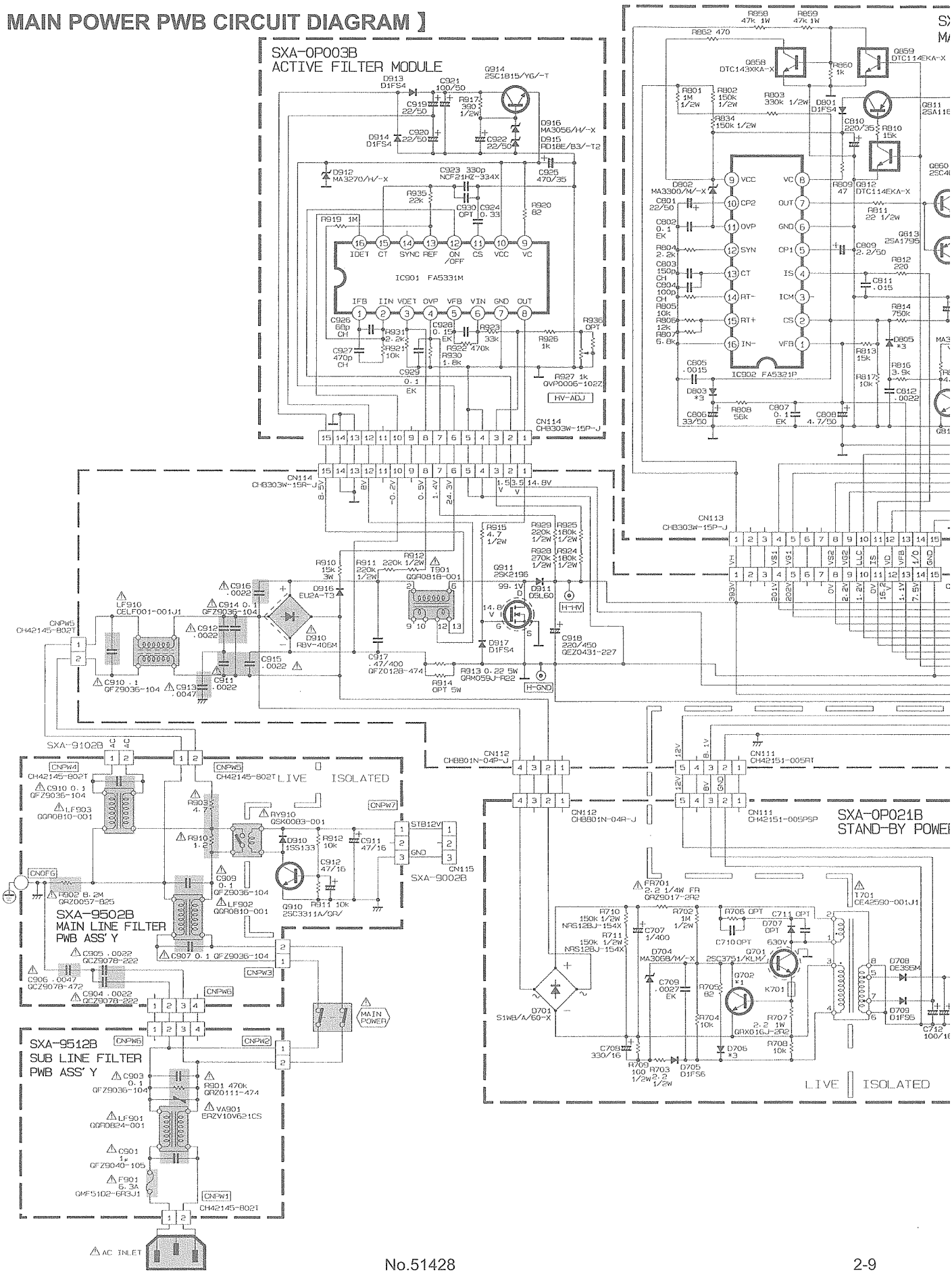
# BLOCK DIAGRAM

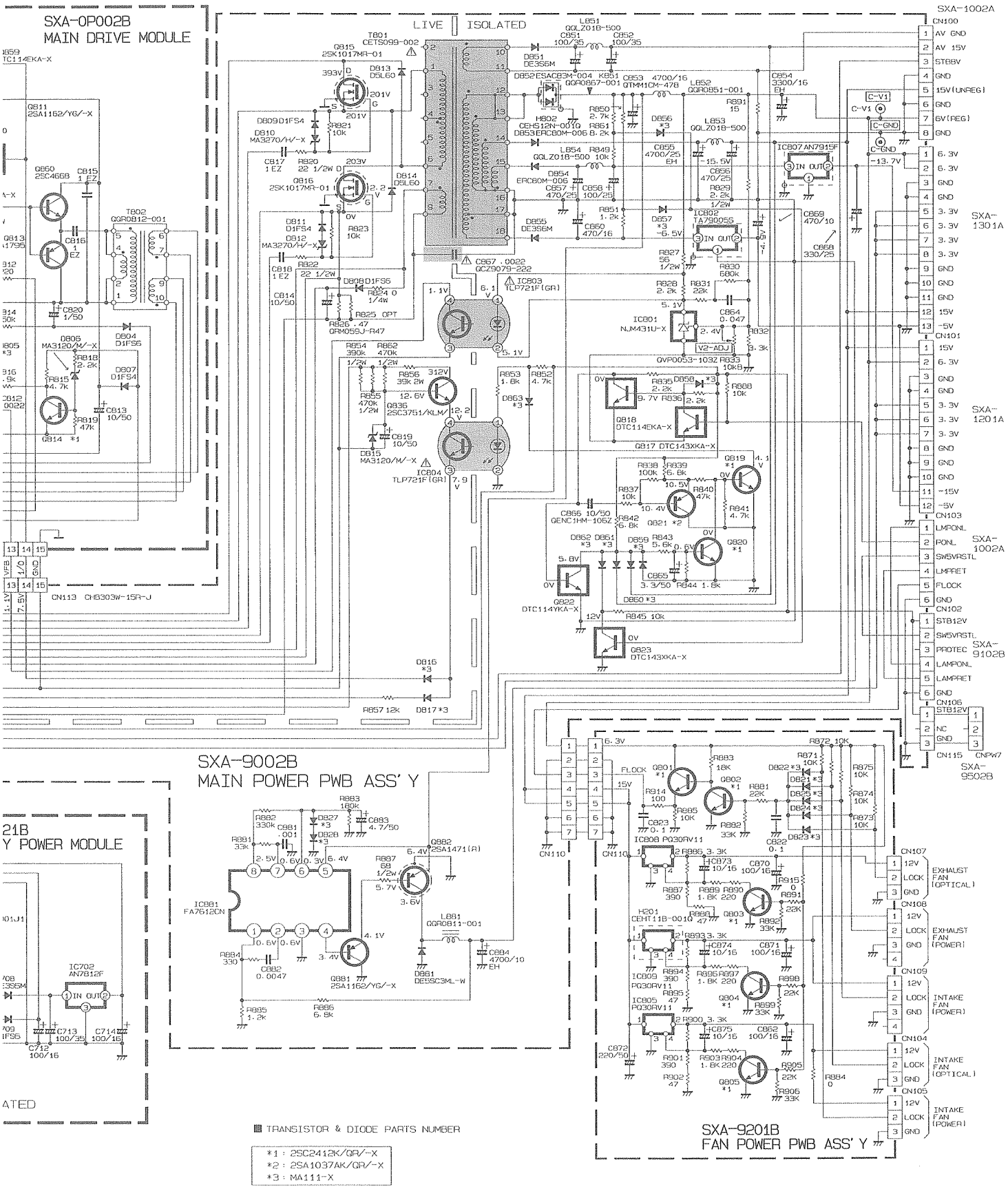



DPC PB ASSY
DD PB ASSY
DRV PB ASSY
SXA-3001A
SXA-3101A
SXA-3201A
RED D-ILA
GREEN D-ILA
BLUE D-ILA
Amp
A/D
2Pahse 4Phase
H Expand
V Expand
3M FIFO
SGRAM
SGRAM Controller
Shading γ
OSD D/A
AMP
DC_SW
Buffer
SDRAM
SW
PLL
Distributor
Bus Buffer
DAC
EVR
VCO2
VCO1
Quick Alignment
SUB_CPU CONTROL
DDCTL
Buffer X5
Thermal sensor
Optical Block
Filter Sensor
Fan
Lamp
Lamp Thermostat

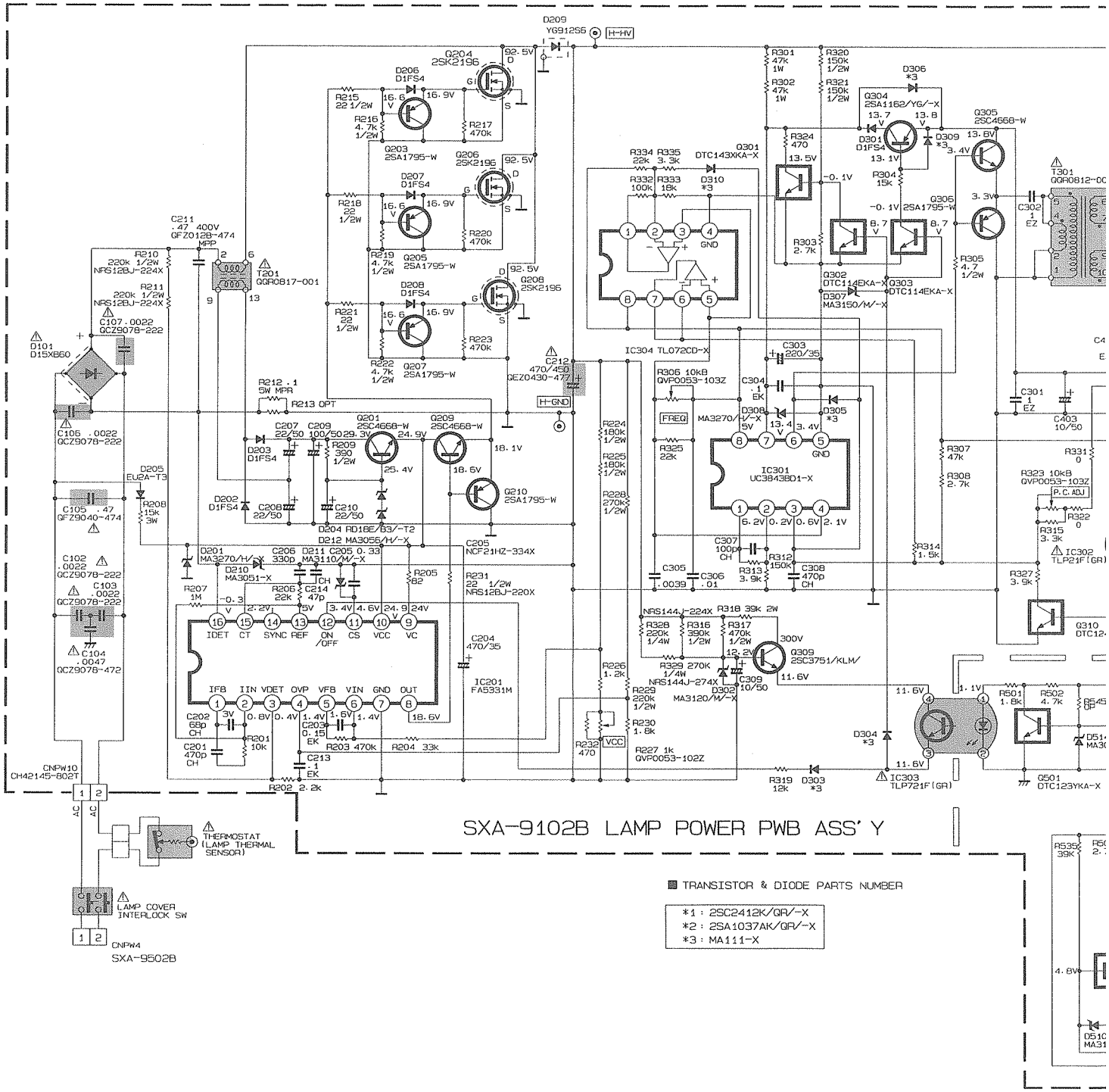
# CIRCUIT DIAGRAMS & PWB PATTERNS

## 【 MAIN POWER PWB CIRCUIT DIAGRAM 】

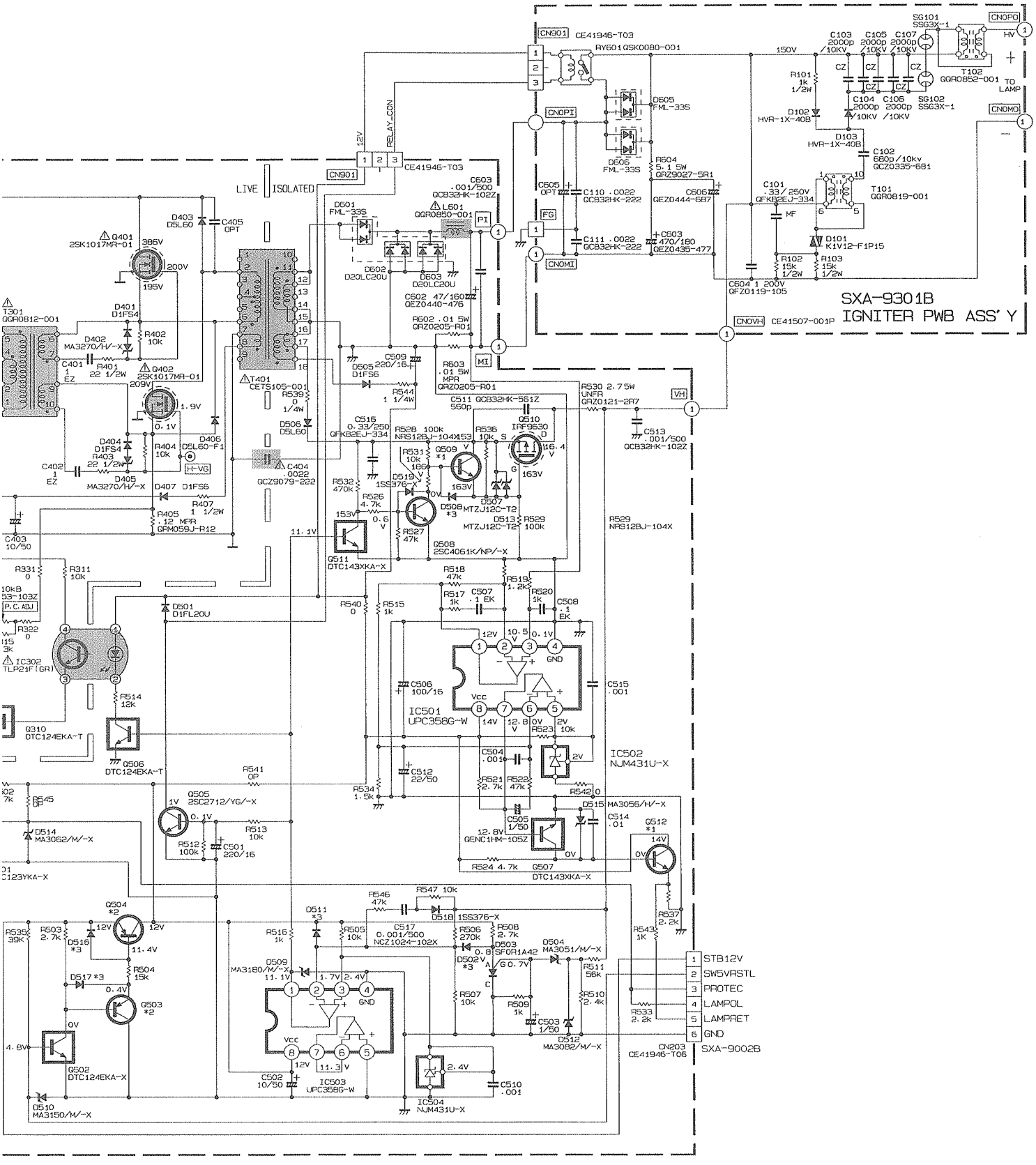



SXA-0P002B
MAIN DRIVE MODULE
LIVE
ISOLATED
SXA-1002A
SXA-1301A
SXA-1201A
SXA-1002A
SXA-9102B
SXA-9502B
SXA-9002B
MAIN POWER PWB ASS' Y
SXA-9201B
FAN POWER PWB ASS' Y
CN113 CHB303W-15R-J
TRANSISTOR & DIODE PARTS NUMBER
*1 : 2SC2412K/QR/-X
*2 : 2SA1037AK/QR/-X
*3 : MA111-X

# 【 LAMP POWER PWB CIRCUIT DIAGRAM 】

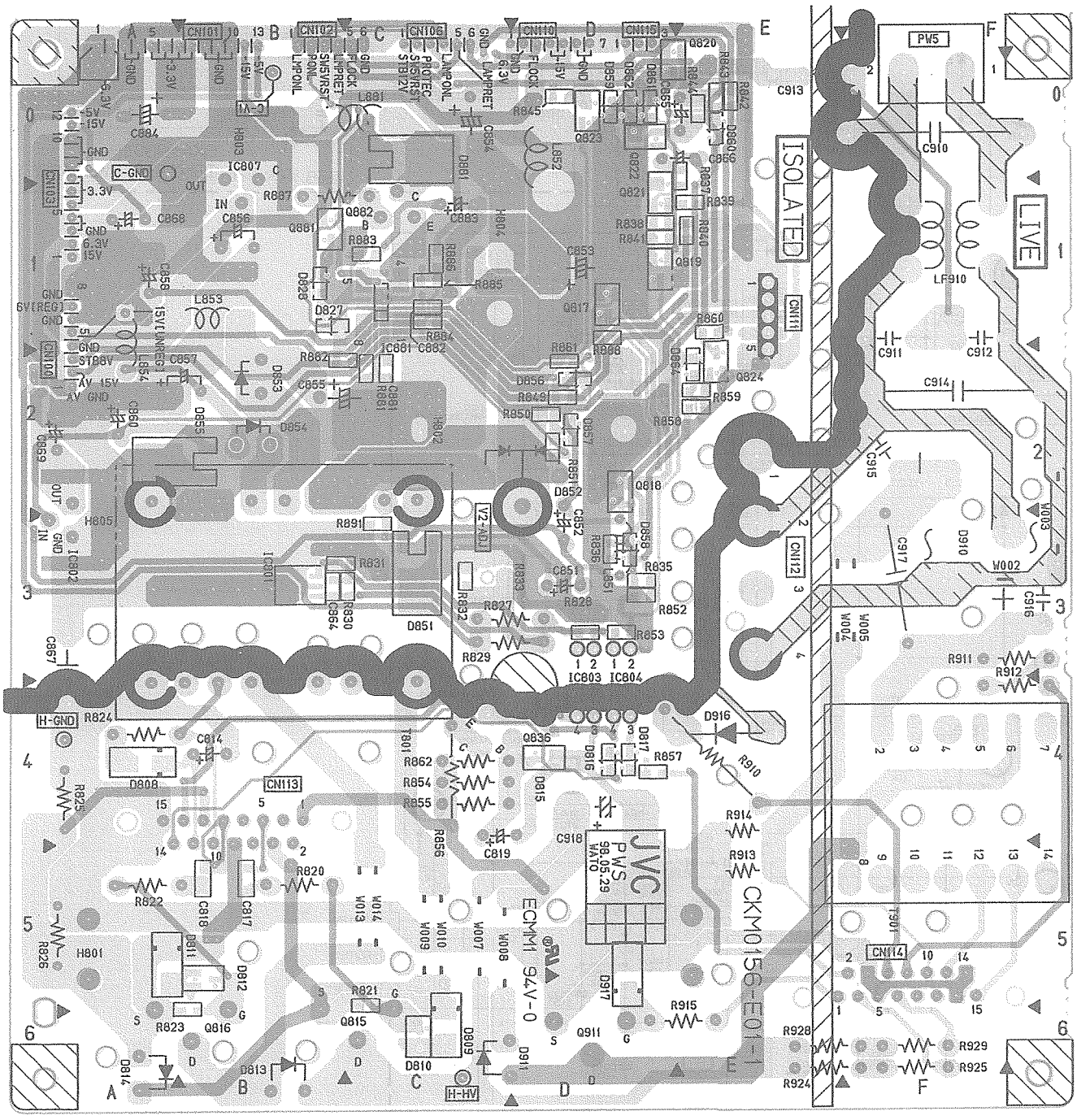


DLA-S10E
DLA-S10EK



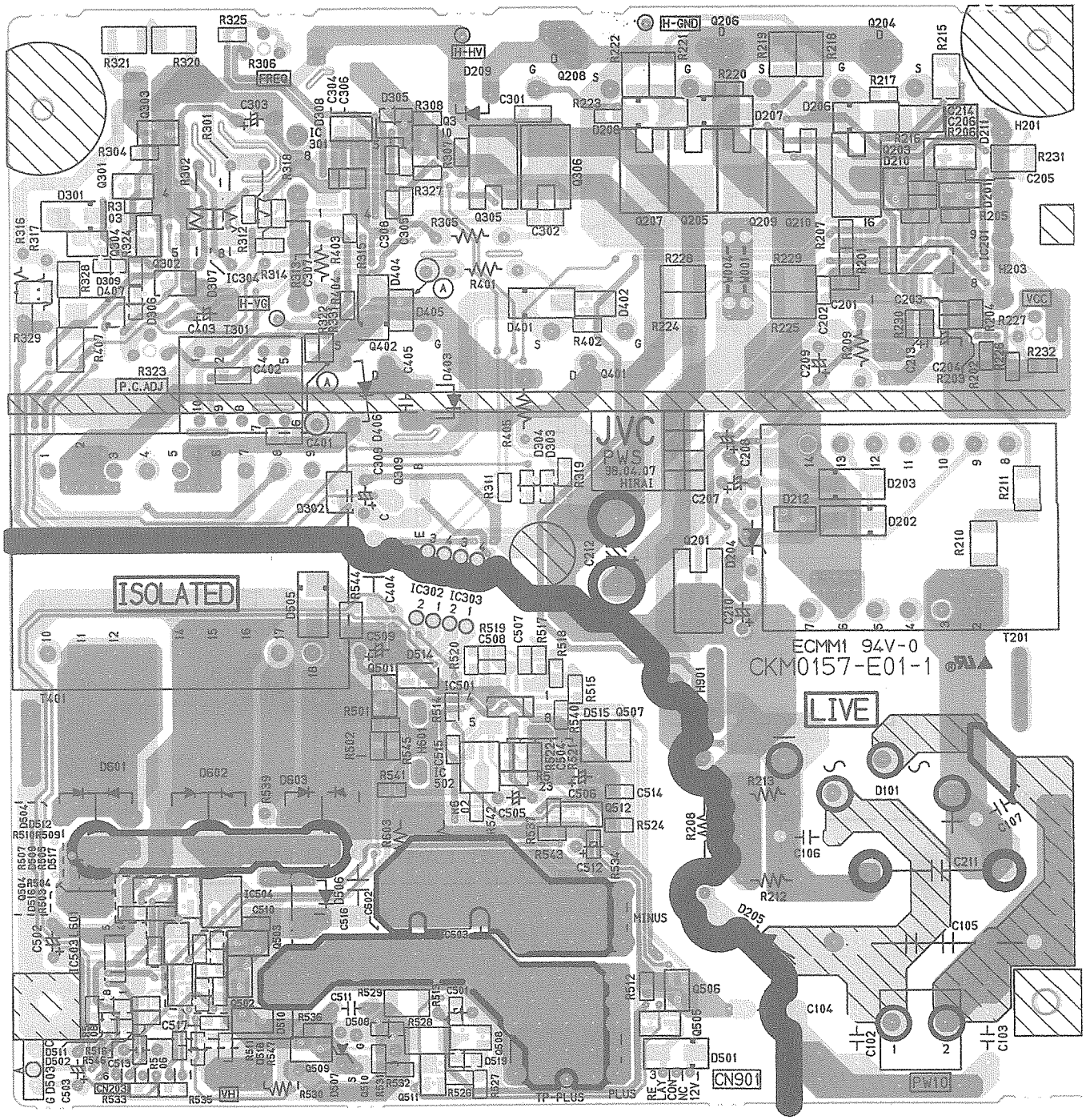
## 【 MAIN POWER PWB PATTERN 】

FRONT



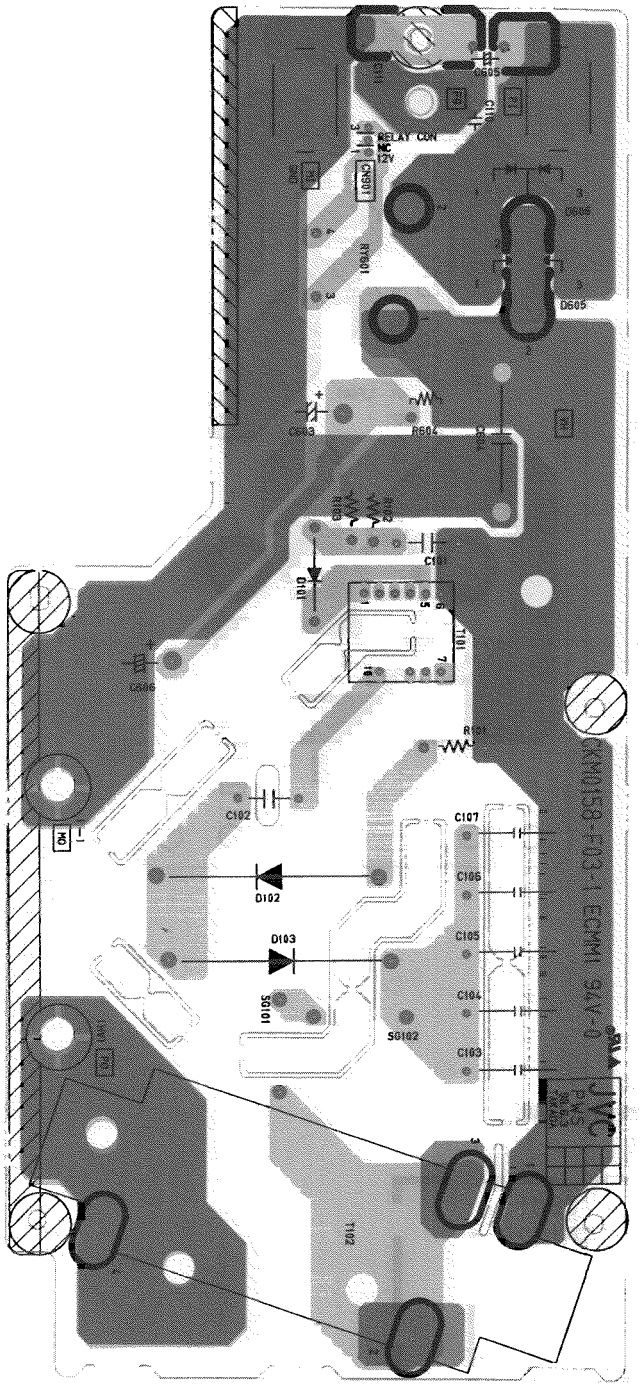
## 〖 LAMP POWER PWB PATTERN 〗

FRONT



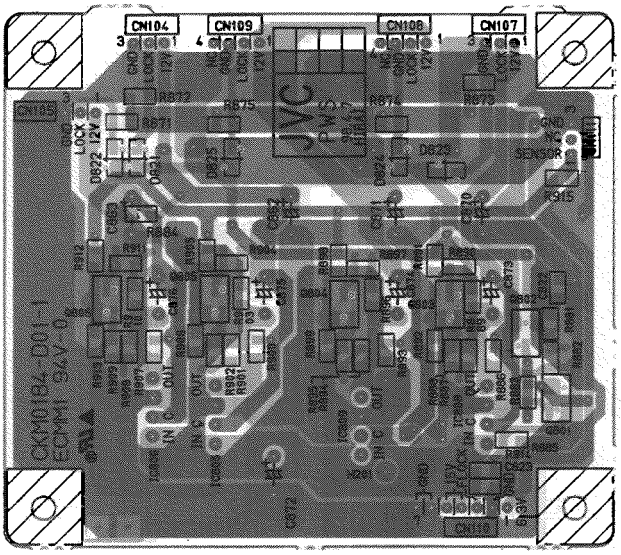
## 【 IGNITER PWB PATTERN 】

FRONT

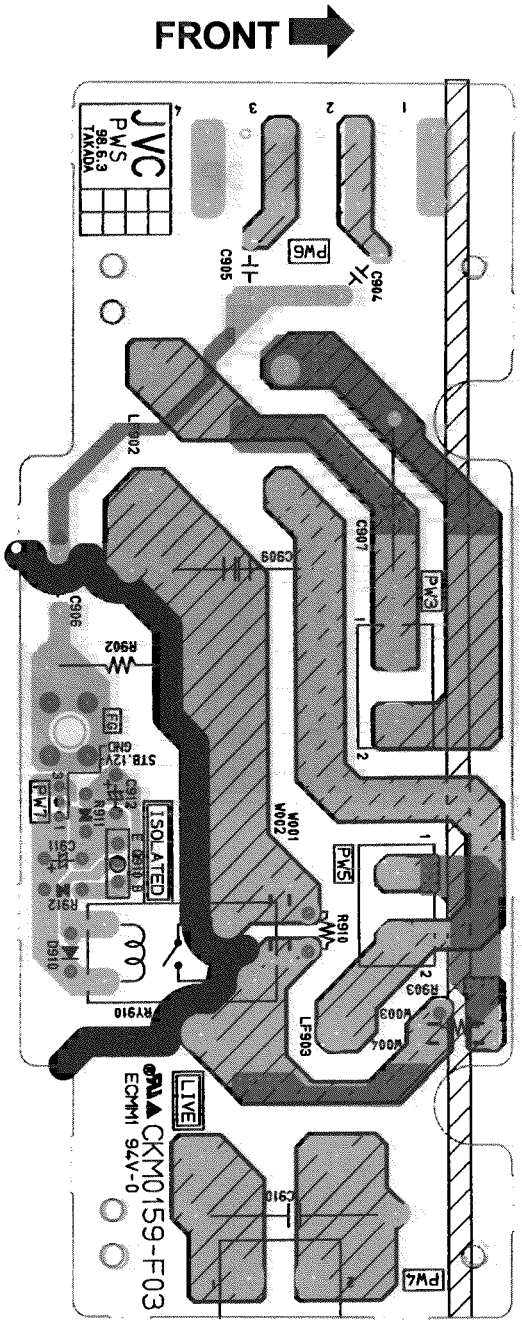



## 【 FAN POWER PWB PATTERN 】

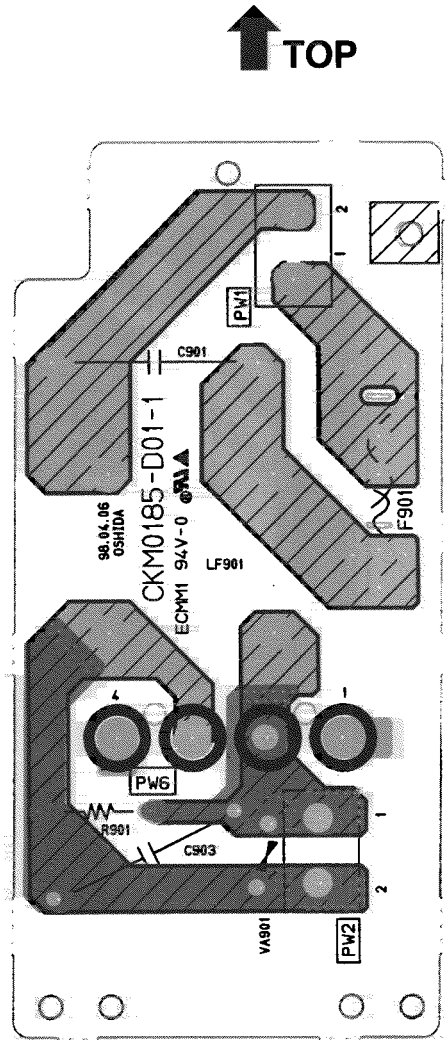
TOP



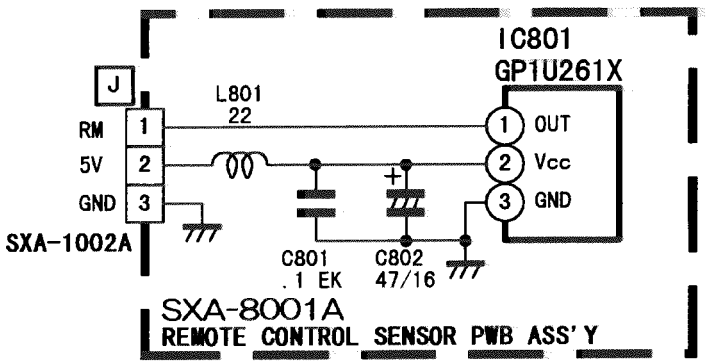
## 【 MAIN LINE FILTER PWB PATTERN 】




## 【 SUB LINE FILTER PWB PATTERN 】




## 【 REMOTE CONTROL SENSOR PWB CIRCUIT DIAGRAM 】



# PARTS LIST

## CAUTION

- The parts identified by the ⚠ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines — in the Parts No. columns will not be supplied .
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied .

### ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

| RESISTORS | | CAPACITORS | |
|---|---|---|---|
| C R | Carbon Resistor | C CAP. | Ceramic Capacitor |
| F R | Fusible Resistor | E CAP. | Electrolytic Capacitor |
| P R | Plate Resistor | M CAP. | Mylar Capacitor |
| V R | Variable Resistor | HV CAP. | High Voltage Capacitor |
| HV R | High Voltage Resistor | MF CAP. | Metalized Film Capacitor |
| MF R | Metal Film Resistor | MM CAP. | Metalized Mylar Capacitor |
| MG R | Metal Glazed Resistor | MP CAP. | Metalized Polystyrol Capacitor |
| MP R | Metal Plate Resistor | PP CAP. | Polypropylene Capacitor |
| OM R | Metal Oxide Film Resistor | PS CAP. | Polystyrol Capacitor |
| CMF R | Coating Metal Film Resistor | TF CAP. | Thin Film Capacitor |
| UNF R | Non-Flammable Resistor | MPP CAP. | Metalized Polypropylene Capacitor |
| CH V R | Chip Variable Resistor | TAN. CAP. | Tantalum Capacitor |
| CH MG R | Chip Metal Glazed Resistor | CH C CAP. | Chip Ceramic Capacitor |
| COMP. R | Composition Resistor | BP E CAP. | Bi-Polar Electrolytic Capacitor |
| LPTC R | Linear Positive Temperature Coefficient Resistor | CH AL E CAP. | Chip Aluminum Electrolytic Capacitor |
| | | CH AL BP CAP. | Chip Aluminum Bi-Polar Capacitor |
| | | CH TAN. E CAP. | Chip Tantalum Electrolytic Capacitor |
| | | CH AL BP E CAP. | Chip Tantalum Bi-Polar Electrolytic Capacitor |

| TOLERANCES | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| F | G | J | K | M | N | R | H | Z | P |
| ±1% | ±2% | ±5% | ±10% | ±20% | ±30% | +30%<br>-10% | +50%<br>-10% | +80%<br>-20% | +100%<br>0% |

# CONTENTS

■ USING P.W. BOARD & REMOTE CONTROL UNIT ····· 3-2

■ EXPLODED VIEW ····· 3-3
■ EXPLODED VIEW PARTS LIST ····· 3-5

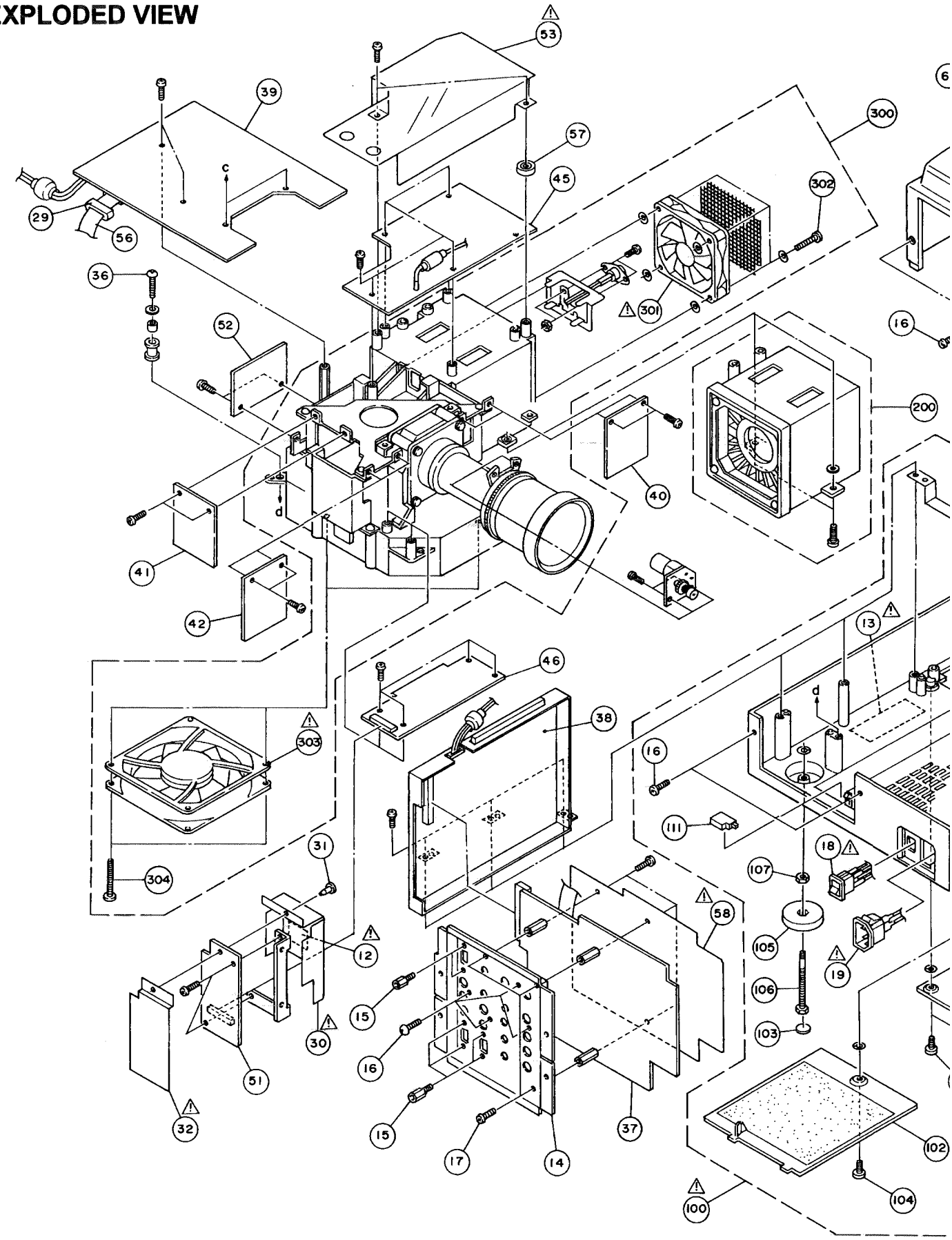
■ PRINTED WIRING BOARD PARTS LIST
- ANALOG PW BOARD ASS'Y (SXA-1002A) ····· 3-6
- DPC PW BOARD ASS'Y (SXA-1201A) ····· 3-6
- REMOTE CONTROL SENSOR PW BOARD ASS'Y (SXA-8001A) ····· 3-6
- MAIN POWER PW BOARD ASS'Y (SXA-9002B)**(DLA-S10E)** ····· 3-6
- MAIN POWER PW BOARD ASS'Y (SXA-9001B)**(DLA-S10EK)** ····· 3-7
- LAMP POWER PW BOARD ASS'Y (SXA-9102B) ····· 3-9
- FAN POWER PW BOARD ASS'Y (SXA-9201B) ····· 3-10
- IGNITER PW BOARD ASS'Y (SXA-9302B) ····· 3-11
- MAIN LINE FILTER PW BOARD ASS'Y (SXA-9502B) ····· 3-11
- SUB LINE FILTER PW BOARD ASS'Y (SXA-9512B) ····· 3-11

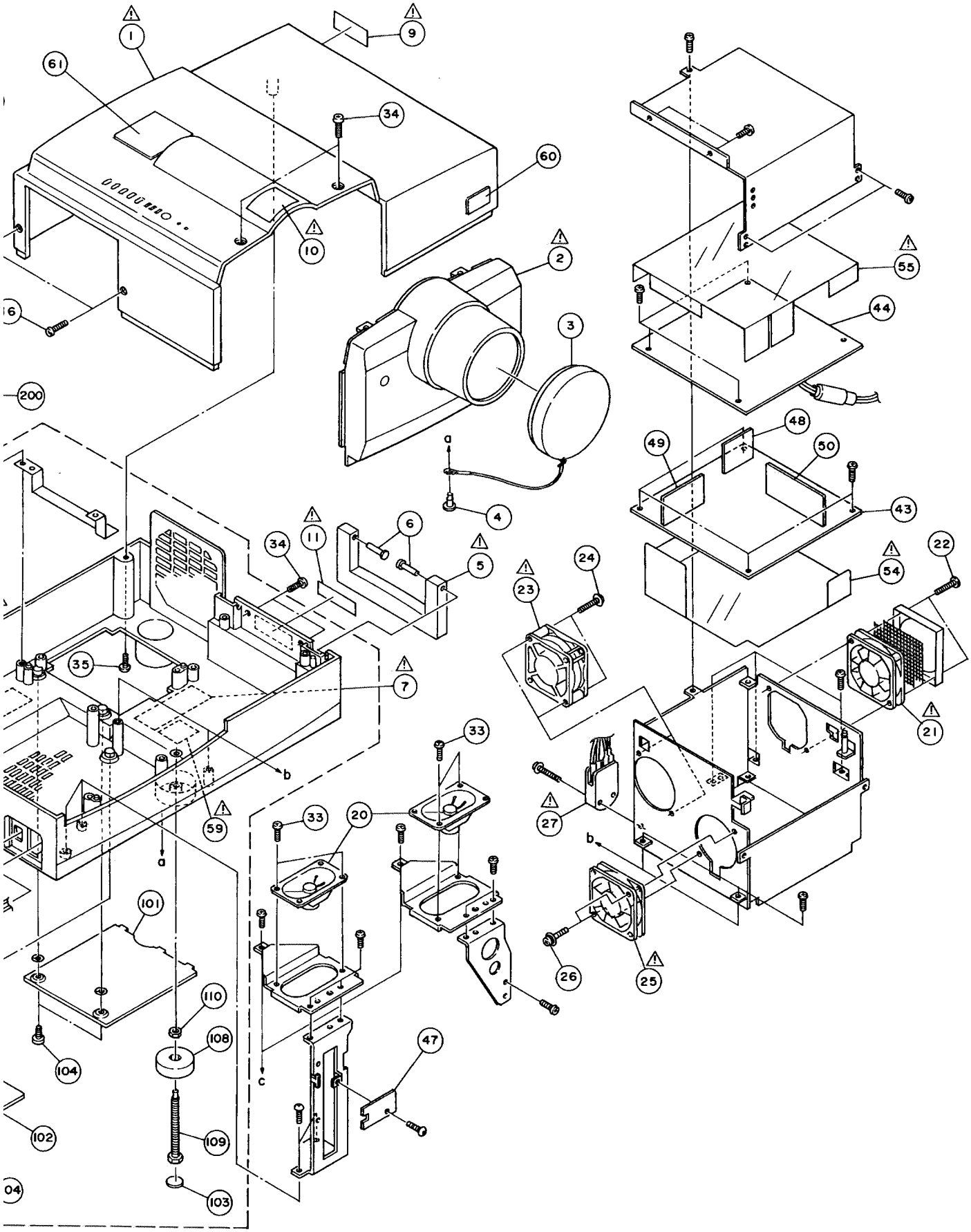
■ REMOTE CONTROL UNIT PARTS LIST ····· 3-11
■ PACKING ····· 3-12
■ PACKING PARTS LIST ····· 3-12

## USING P.W. BOARD & REMOTE CONTROL UNIT

| Model / P.W.B ASS'Y | DLA-S10E | DLA-S10EK |
|---|---|---|
| ANALOG P.W.B | SXA-1002A | ← |
| DPC P.W.B | SXA-1201A | ← |
| DD P.W.B | SXA-1301A | ← |
| R DRIVE P.W.B | SXA-3001A | ← |
| G DRIVE P.W.B | SXA-3101A | ← |
| B DRIVE P.W.B | SXA-3201A | ← |
| MAIN POWER P.W.B | SXA-9002B | SXA-9001B |
| LAMP POWER P.W.B | SXA-9102B | ← |
| IGNITER P.W.B | SXA-9302B | ← |
| MAIN LINE FILTER P.W.B | SXA-9502B | ← |
| REMOTE CONTROL SENSOR P.W.B | SXA-8001A | ← |
| STAND-BY POWER MODULE | SXA-0P021B | ← |
| MAIN DRIVE MODULE | SXA-0P002B | ← |
| ACT-FILTER MODULE | SXA-0P003B | ← |
| SUB LINE FILTER P.W.B | SXA-9512B | ← |
| FAN POWER P.W.B | SXA-9201B | ← |
| REMOTE CONTROL UNIT | RM-M10SG | ← |

# EXPLODED VIEW




1
9
61
34
60
10
2
3
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200
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44
48
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43
54
22
24
23
11
34
6
5
35
7
33
20
59
101
110
108
104
102
109
103
47
27
26
25
21
a
b
c

# EXPLODED VIEW PARTS LIST

| ⚠ | Ref.No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|---|
| ⚠ | 1 | LC20045-011A | TOP COVER ASSY | | |
| ⚠ | 2 | LC20184-002A | COVER (LENS-2) | | |
| | 3 | LC30408-001A | CAP ASSY | | |
| | 4 | BHD0068 | RIBET | | |
| ⚠ | 5 | BHQ20016-4 | HANDLE | | |
| | 6 | LC40053-001A | SHAFT | ×2 | |
| ⚠ | 7 | LC30330-001B | LABEL E(L CAUTIO | | |
| ⚠ | 9 | LC30502-001A | LABEL (DO CATION | | |
| ⚠ | 10 | LC30332-001A | LABEL E(L CAUTIO | | |
| ⚠ | 11 | LC30334-007B | RATING LABEL | | |
| ⚠ | 12 | LC40213-001A | LABEL(FUSE CAUTI | | |
| ⚠ | 13 | LC30329-001D | LABEL E(L CAUTIO | | |
| | 14 | LC30220-001D | TERMINAL BOARD | | |
| | 15 | QNB0081-001 | NAT | ×6 | |
| | 16 | SDSP3006N | SCREW | ×8 | |
| | 17 | SBSG3008N | TAPPING SCREW | ×4 | |
| ⚠ | 18 | QSW0699-001 | SEESAW SWITCH | | |
| ⚠ | 19 | QMCB004-001 | 3P INLET | | |
| | 20 | QAS0011-001 | SPEAKER | ×2 | |
| ⚠ | 21 | QAR0055-001 | FAN MOTOR 60 | | |
| | 22 | SDSP3020M | SCREW | ×2 | |
| ⚠ | 23 | QAR0044-001 | FAN MOTOR 60 | | |
| | 24 | DPSP3030Z | ASSY SCREW | ×2 | |
| ⚠ | 25 | QAR0056-001 | FAN MOTOR 60 | | |
| | 26 | DPSP3025Z | ASSY SCREW | ×2 | |
| ⚠ | 27 | QSW0700-001 | PUSH SWITCH | | |
| | 29 | QQR0491-001 | FILTER | | |
| ⚠ | 30 | LC30320-001A | SHEET(F.SUB.PWB) | | |
| | 31 | BHD0068 | RIBET | | |
| ⚠ | 32 | LC40178-001A | COVER | | |
| | 33 | SBSG3008Z | TAPPING SCREW | ×4 | |
| | 34 | SDSP4010N | SCREW | ×4 | |
| | 35 | SBSG4012Z | TAP SCREW | | |
| | 36 | LC40194-001A | SPECIAL SCREW | ×6 | |
| | 37 | SXA-1002A | ANALOG PB | | |
| | 38 | SXA-1201A | DPC PB ASSY | | |
| | 39 | SXA-1301A | DD PB ASSY | | |
| | 40 | SXA-3001A | R DRIVE PB | | |
| | 41 | SXA-3101A | G DRIVE PB | | |
| | 42 | SXA-3201A | B DRIVE PB | | |
| | 43 | ---------- | MAIN POWER PB | SXA-9002B(DLA-S10E) | |
| | 43 | ---------- | MAIN POWER PB | SXA-9001B(DLA-S10EK) | |
| | 44 | ---------- | LAMP POWER PB | SXA-9102B | |
| | 45 | ---------- | IGNITER PB | SXA-9302B | |
| | 46 | ---------- | MAIN LINE FILTER | SXA-9502B | |
| | 47 | ---------- | REMOTE CONTROL P | SXA-8001A | |
| | 48 | SXA-0P021B | STAND BY POWER MODU | | |
| | 49 | SXA-0P002B | MAIN DRIVE MODUL | | |
| | 50 | SXA-0P003B | ACT-FILTER MODUL | | |
| | 51 | ---------- | SUB LINE FILTER | SXA-9512B | |
| | 52 | ---------- | FAN POWER PB | SXA-9201B | |
| ⚠ | 53 | LC30234-001B | COVER | | |
| ⚠ | 54 | LC30222-001D | COVER SHEET | | |
| ⚠ | 55 | LC30223-001B | SHEET | | |
| | 56 | QUQ410-2408CC | FFC WIRE ASS'Y | | |
| | 57 | LC40269-001A | PB STOPPER | | |
| ⚠ | 58 | LC30409-001B | SHIELD (ANALOG) | | |
| ⚠ | 59 | LC30331-001B | LABEL E(L CAUTIO | | |
| | 60 | PGD30011-1 | JVC MARK | | |
| | 61 | LC30219-002A | NAME PLATE | | |
| ⚠ | 100 | LC20042-006B | B.CHASSIS ASSY | Inc.NO.101~111 | |
| | 101 | LC30207-004A | COVER LAMP ASSY | | |
| | 102 | LC30208-001B | FILTER | | |
| | 103 | BHQ40041-3 | FOOT(L) | ×3 | |
| | 104 | BHD0055 | NUT | ×3 | |
| | 105 | BHQ30109-2 | FOOT(R) | | |
| | 106 | LC40049-001A | BOLT | | |
| | 107 | NTS5000R | NUT | | |
| | 108 | BHQ30108-2 | FOOT(F) | | |
| | 109 | LC40050-001A | BOLT | | |
| | 110 | NTS8000R | NUT | | |
| | 111 | QSW0701-001 | PUSH SWITCH | | |
| | 200 | G10-LAMP-SU | LAMP ASSY | | |
| | 300 | S10-OPSA | OPTICS SA | Inc.No.301~304 | |
| ⚠ | 301 | QAR0059-001 | FAN MOTOR 90 | | |
| | 302 | SDSP4040M | SCREW | ×4 | |
| ⚠ | 303 | QAR0042-001 | FAN MOTOR 120 | | |
| | 304 | SDSP4035M | SCREW | ×2 | |

# PRINTED WIRING BOARD PARTS LIST

## ANALOG P.W. BOARD ASS'Y (SXA-1002A)

The following PC boards are supplied as assemblies.
The component parts on the PC board are available only when the parts are listed in the "PRINTED CIRCUIT BOARD PARTE LIST".

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| **OTHERS** | | | | |
| J1001 | QMCC008-C01 | DIN JACK | | |
| J1003 | CEMB018-001 | BNC CONNECTOR | | |
| J1004-05 | QMS3005-C01 | 3.5 JACK | | |
| J1006 | QNN0202-002 | PIN JACK | | |
| J1007 | QNN0202-001 | PIN JACK | | |
| J1010 | QMS3005-C01 | 3.5 JACK | | |
| J1011 | CEMB010-004 | BNC CONNECTOR | | |
| J1012 | CEMB019-001 | BNC CONNECTOR | | |
| J1014 | QMS3005-C01 | 3.5 JACK | | |

## DPC P.W. BOARD ASS'Y (SXA-1201A)

The following PC boards are supplied as assemblies.
The component parts on the PC board are available only when the parts are listed in the "PRINTED CIRCUIT BOARD PARTE LIST".

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| **OTHERS** | | | | |
| J1001 | QNZ0102-001 | D SUB CONNECT | | |
| J1002 | QNZ0154-001 | 3P BNC CONNECT | | |
| J1003 | QNZ0102-001 | D SUB CONNECT | | |

## REMOTE CONTROL SENSOR P.W. BOARD ASS'Y (SXA-8001A)

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| **CAPACITOR** | | | | |
| C8801 | NCB21EK-104X | C CAP. | 0.1μF 25V K | |
| C8802 | NEH71CM-476X | E CAP. | 47μF 16V M | |
| **COIL** | | | | |
| L8801 | NQL024J-220X | COIL | 22μH | |
| **IC** | | | | |
| IC8801 | GP1U261X | IFR DETECT UNIT | | |

## MAIN POWER P.W. BOARD ASS'Y (SXA-9002B) (DLA-S10E)

| ⚠ Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|
| **VARIABLE RESISTOR** | | | | |
| R9833 | QVP0053-103Z | V R | 10kΩ | |
| **RESISTOR** | | | | |
| R9820 | QRE121J-220Y | C R | 22Ω 1/2W J | |
| R9821 | NRSA02J-103X | MG R | 10kΩ 1/10W J | |
| R9822 | QRE121J-220Y | C R | 22Ω 1/2W J | |
| R9823 | NRSA02J-103X | MG R | 10kΩ 1/10W J | |
| R9824 | QRN141J-0R0Y | C R | 0.0Ω 1/4W J | |
| R9826 | QRM059J-R47 | MP R | | |
| R9827 | QRE121J-560Y | C R | 56Ω 1/2W J | |
| R9828 | NRSA02J-222X | MG R | 2.2kΩ 1/10W J | |
| R9829 | QRE121J-222Y | C R | 2.2kΩ 1/2W J | |
| R9830 | NRSA02J-684X | MG R | 680kΩ 1/10W J | |
| R9831 | NRSA02J-223X | MG R | 22kΩ 1/10W J | |
| R9832 | NRSA02J-332X | MG R | 3.3kΩ 1/10W J | |
| R9835-36 | NRSA02J-222X | MG R | 2.2kΩ 1/10W J | |
| R9837 | NRSA02J-103X | MG R | 10kΩ 1/10W J | |
| R9838 | NRSA02J-104X | MG R | 100kΩ 1/10W J | |
| R9839 | NRSA02J-682X | MG R | 6.8kΩ 1/10W J | |
| R9840 | NRSA02J-473X | MG R | 47kΩ 1/10W J | |
| R9841 | NRSA02J-472X | MG R | 4.7kΩ 1/10W J | |
| R9842 | NRSA02J-682X | MG R | 6.8kΩ 1/10W J | |
| R9843 | NRSA02J-562X | MG R | 5.6kΩ 1/10W J | |
| R9844 | NRSA02J-222X | MG R | 2.2kΩ 1/10W J | |
| R9845 | NRSA02J-103X | MG R | 10kΩ 1/10W J | |
| R9849 | NRSA02J-103X | MG R | 10kΩ 1/10W J | |
| R9850 | NRSA02J-272X | MG R | 2.7kΩ 1/10W J | |
| R9851 | NRSA02J-122X | MG R | 1.2kΩ 1/10W J | |
| R9852 | NRSA02J-272X | MG R | 2.7kΩ 1/10W J | |
| R9853 | NRSA02J-561X | MG R | 560Ω 1/10W J | |
| R9854-55 | NRS12BJ-154X | CHIP RESISTOR | | |
| R9856 | QRL029J-393 | OM R | 39kΩ 2W J | |
| R9857 | NRSA02J-123X | MG R | 12kΩ 1/10W J | |
| R9861 | NRSA02J-822X | MG R | 8.2kΩ 1/10W J | |
| R9862 | NRS12BJ-154X | CHIP RESISTOR | | |
| R9881 | NRSA02J-333X | MG R | 33kΩ 1/10W J | |
| R9882 | NRSA02J-334X | MG R | 330kΩ 1/10W J | |
| R9883 | NRSA02J-184X | MG R | 180kΩ 1/10W J | |
| R9884 | NRSA02J-331X | MG R | 330Ω 1/10W J | |
| R9885 | NRSA02J-122X | MG R | 1.2kΩ 1/10W J | |
| R9886 | NRSA02J-682X | MG R | 6.8kΩ 1/10W J | |
| R9887 | QRE121J-680Y | C R | 68Ω 1/2W J | |
| R9888 | NRSA02J-103X | MG R | 10kΩ 1/10W J | |
| R9889 | NRS12BJ-154X | CHIP RESISTOR | | |
| R9891 | NRSA02J-150X | MG R | 15Ω 1/10W J | |
| R9910 | QRL039J-153 | OM R | 15kΩ 3W J | |
| R9911-12 | QRE121J-224Y | C R | 220kΩ 1/2W J | |
| R9913 | QRM059J-R22 | MP R | | |
| R9915 | QRE121J-4R7Y | C R | 4.7Ω 1/2W J | |
| R9924-25 | QRE121J-184Y | C R | 180kΩ 1/2W J | |
| R9928 | QRE121J-274Y | C R | 270kΩ 1/2W J | |
| R9929 | QRE121J-224Y | C R | 220kΩ 1/2W J | |
| **CAPACITOR** | | | | |
| C9814 | QEHR1HM-106Z | E CAP. | 10μF 50V M | |
| C9817-18 | NCF11EZ-105X | C CAP. | 1μF 25V Z | |
| C9819 | QEHR1HM-106Z | E CAP. | 10μF 50V M | |
| C9851-52 | QEHR1VM-107Z | E CAP. | 100μF 35V M | |
| C9853 | CEX41419-001 | E CAP. | | |
| C9854 | QEHB1CM-338 | E CAP. | 3300μF 16V M | |
| C9855 | QEHB1EM-478 | E CAP. | 4700μF 25V M | |
| C9856-57 | QEHR1EM-477Z | E CAP. | 470μF 25V M | |

| ⚠ | Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|---|
| | **CAPACITOR** | | | | |
| | C9858 | QEHR1EM-107Z | E CAP. | 100µF 25V | M |
| | C9860 | QEHR1CM-477Z | E CAP. | 470µF 16V | M |
| | C9864 | NCB21HK-473X | C CAP. | 0.047µF 50V | K |
| | C9865 | QEHR1HM-335Z | E CAP. | 3.3µF 50V | M |
| | C9866 | QTNC1CM-106Z | E CAP. | 10µF 16V | M |
| ⚠ | C9867 | QCZ9079-102 | C CAP. | 1000pFAC250V | M |
| | C9868 | QEHR1EM-337Z | E CAP. | 330µF 25V | M |
| | C9869 | QEHR1AM-477Z | E CAP. | 470µF 10V | M |
| | C9881 | NCB21HK-102X | C CAP. | 1000pF 50V | K |
| | C9882 | NCB21HK-472X | C CAP. | 4700pF 50V | K |
| | C9883 | QEHR1HM-475Z | E CAP. | 4.7µF 50V | M |
| | C9884 | QEHB1AM-478 | E CAP. | 4700µF 10V | M |
| ⚠ | C9910 | QFZ9036-104 | M.F.CAP. | | |
| ⚠ | C9914 | QFZ9036-104 | M.F.CAPACITOR | 0.1µFAC250V | M |
| ⚠ | C9915 | QCZ9078-222 | C CAP. | | |
| ⚠ | C9916 | QCZ9078-222 | C CAP. | | |
| | C9917 | QFZ0128-474 | M.PP CAPACITOR | 0.47µF 400V ±3% | |
| | C9918 | QEZ0431-227 | E CAP. | | |
| | **TRANSFORMER** | | | | |
| ⚠ | T9801 | CETS099-002A | SE TRANSF. | | |
| ⚠ | T9901 | QQR0818-001 | CHOKE COIL | | |
| | **COIL** | | | | |
| | L9851 | QQLZ018-500 | HEATER CHOKE | | |
| | L9852 | QQR0851-001 | CHOKE COIL | | |
| | L9853-54 | QQLZ018-500 | HEATER CHOKE | | |
| | L9881 | QQR0811-001 | CHOKE COIL | | |
| | **DIODE** | | | | |
| | D9808 | D1FS6-X | CHIP DIODE | | |
| | D9809 | D1FS4-X | CHIP DIODE | | |
| | D9810 | MA3270/H/-X | CHIP ZENER DIODE | | |
| | D9811 | D1FS4-X | CHIP DIODE | | |
| | D9812 | MA3270/H/-X | CHIP ZENER DIODE | | |
| | D9813-14 | DSL60 | SI.DIODE | | |
| | D9815 | MA3120/M/-X | ZENER DIODE | | |
| | D9816-17 | MA111-X | SI.DIODE | | |
| | D9827-28 | MA111-X | SI.DIODE | | |
| | D9851 | DE3S6M-W | CHIP DIODE | | |
| | D9852 | ESAC83M-004 | SI.DIODE | | |
| | D9853-54 | ERC80M-006 | SI.DIODE | | |
| | D9855 | DE3S6M-W | CHIP DIODE | | |
| | D9856-62 | MA111-X | SI.DIODE | | |
| | D9881 | DE5SC3ML-W | SI.DIODE | | |
| ⚠ | D9910 | RBV-406M | BRIDGE DIODE | | |
| | D9911 | DSL60 | SI.DIODE | | |
| | D9916 | EU2A-T3 | SI.DIODE | | |
| | D9917 | D1FS4-X | CHIP DIODE | | |
| | **TRANSISTOR** | | | | |
| ⚠ | Q9815 | 2SK1017MR-01 | F.E.T. | | |
| ⚠ | Q9816 | 2SK1017MR-01 | F.E.T. | | |
| | Q9817 | DTC143XKA-X | DIGI.TRANSISTOR | | |
| | Q9818 | DTC114EKA-X | DIGI.TRANSISTOR | | |
| | Q9819-20 | 2SC2412K/QR/-X | SI.TRANSISTOR | | |
| | Q9821 | 2SA1037AK/QR/-X | SI.TRANSISTOR | | |
| | Q9822 | DTC114YKA-X | DIGI.TRANSISTOR | | |
| | Q9823 | DTC143XKA-X | DIGI.TRANSISTOR | | |
| | Q9836 | 2SC3751/KLM/ | SI.TRANSISTOR | | |
| | Q9881 | 2SA1162/YG/-X | SI.TRANSISTOR | | |
| | Q9882 | 2SA1471/R/ | SI.TRANSISTOR | | |
| | Q9911 | 2SK2196-F1 | POWER MOS FET | | |
| | **IC** | | | | |
| | IC9801 | NJM431U-X | I.C.(MONO-ANA) | | |
| | IC9802 | TA79005S | I.C.(MONO-ANA) | | |
| ⚠ | IC9803 | TLP721F(GR) | I.C.(PH.COUPLER) | | |
| ⚠ | IC9804 | TLP721F(GR) | I.C.(PH.COUPLER) | | |
| | IC9807 | AN7915F | I.C. | | |
| | IC9881 | FA7612CN-X | I C | | |
| | **OTHERS** | | | | |
| | K9851 | QQR0867-001 | FERRITE CORE | | |
| ⚠ | LF9910 | CELF001-001J1 | LINE FILTER | | |

## MAIN POWER P.W. BOARD ASS'Y (SXA-9001B) (DLA-S10EK)

| ⚠ | Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|---|
| | **VARIABLE RESISTOR** | | | | |
| | R9833 | QVP0053-103Z | V R | 10kΩ | |
| | **RESISTOR** | | | | |
| | R9820 | QRE121J-220Y | C R | 22Ω 1/2W | J |
| | R9821 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9822 | QRE121J-220Y | C R | 22Ω 1/2W | J |
| | R9823 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9824 | QRN141J-0R0Y | C R | 0.0Ω 1/4W | J |
| | R9826 | QRM059J-R47 | MP R | | |
| | R9827 | QRE121J-560Y | C R | 56Ω 1/2W | J |
| | R9828 | NRSA02J-222X | MG R | 2.2kΩ 1/10W | J |
| | R9829 | QRE121J-222Y | C R | 2.2kΩ 1/2W | J |
| | R9830 | NRSA02J-684X | MG R | 680kΩ 1/10W | J |
| | R9831 | NRSA02J-223X | MG R | 22kΩ 1/10W | J |
| | R9832 | NRSA02J-332X | MG R | 3.3kΩ 1/10W | J |
| | R9835-36 | NRSA02J-222X | MG R | 2.2kΩ 1/10W | J |
| | R9837 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9838 | NRSA02J-104X | MG R | 100kΩ 1/10W | J |
| | R9839 | NRSA02J-682X | MG R | 6.8kΩ 1/10W | J |
| | R9840 | NRSA02J-473X | MG R | 47kΩ 1/10W | J |
| | R9841 | NRSA02J-472X | MG R | 4.7kΩ 1/10W | J |
| | R9842 | NRSA02J-682X | MG R | 6.8kΩ 1/10W | J |
| | R9843 | NRSA02J-562X | MG R | 5.6kΩ 1/10W | J |
| | R9844 | NRSA02J-222X | MG R | 2.2kΩ 1/10W | J |
| | R9845 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9849 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9850 | NRSA02J-272X | MG R | 2.7kΩ 1/10W | J |
| | R9851 | NRSA02J-122X | MG R | 1.2kΩ 1/10W | J |
| | R9852 | NRSA02J-272X | MG R | 2.7kΩ 1/10W | J |
| | R9853 | NRSA02J-561X | MG R | 560Ω 1/10W | J |
| | R9854 | QRE121J-394Y | C R | 390kΩ 1/2W | J |
| | R9855 | QRE121J-474Y | C R | 470kΩ 1/2W | J |
| | R9856 | QRL029J-393 | OM R | 39kΩ 2W | J |
| | R9857 | NRSA02J-123X | MG R | 12kΩ 1/10W | J |
| | R9861 | NRSA02J-822X | MG R | 8.2kΩ 1/10W | J |
| | R9862 | QRE121J-474Y | C R | 470kΩ 1/2W | J |
| | R9881 | NRSA02J-333X | MG R | 33kΩ 1/10W | J |
| | R9882 | NRSA02J-334X | MG R | 330kΩ 1/10W | J |
| | R9883 | NRSA02J-184X | MG R | 180kΩ 1/10W | J |
| | R9884 | NRSA02J-331X | MG R | 330Ω 1/10W | J |
| | R9885 | NRSA02J-122X | MG R | 1.2kΩ 1/10W | J |
| | R9886 | NRSA02J-682X | MG R | 6.8kΩ 1/10W | J |
| | R9887 | QRE121J-680Y | C R | 68Ω 1/2W | J |
| | R9888 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9891 | NRSA02J-150X | MG R | 15Ω 1/10W | J |
| | R9910 | QRL039J-153 | OM R | 15kΩ 3W | J |
| | R9911-12 | QRE121J-224Y | C R | 220kΩ 1/2W | J |
| | R9913 | QRM059J-R22 | MP R | | |
| | R9915 | QRE121J-4R7Y | C R | 4.7Ω 1/2W | J |
| | R9924-25 | QRE121J-184Y | C R | 180kΩ 1/2W | J |
| | R9928 | QRE121J-274Y | C R | 270kΩ 1/2W | J |
| | R9929 | QRE121J-224Y | C R | 220kΩ 1/2W | J |
| | **CAPACITOR** | | | | |
| | C9814 | QEHR1HM-106Z | E CAP. | 10µF 50V | M |
| | C9817-18 | NCF11EZ-105X | C CAP. | 1µF 25V | Z |
| | C9819 | QEHR1HM-106Z | E CAP. | 10µF 50V | M |
| | C9851-52 | QEHR1VM-107Z | E CAP. | 100µF 35V | M |
| | C9853 | QTMM1CM-478 | E CAPACITOR | | |
| | C9854 | QEHB1CM-338 | E CAP. | 3300µF 16V | M |
| | C9855 | QEHB1EM-478 | E CAP. | 4700µF 25V | M |
| | C9856-57 | QEHR1EM-477Z | E CAP. | 470µF 25V | M |
| | C9858 | QEHR1EM-107Z | E CAP. | 100µF 25V | M |
| | C9860 | QEHR1CM-477Z | E CAP. | 470µF 16V | M |

| ⚠ | Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|---|
| | **CAPACITOR** | | | | |
| | C9864 | NCB21HK-473X | C CAP. | 0.047μF 50V | K |
| | C9865 | QEHR1HM-335Z | E CAP. | 3.3μF 50V | M |
| | C9866 | QTNC1CM-106Z | E CAP. | 10μF 16V | M |
| ⚠ | C9867 | QCZ9079-102 | C CAP. | 1000pFAC250V | M |
| | C9868 | QEHR1EM-337Z | E CAP. | 330μF 25V | M |
| | C9869 | QEHR1AM-477Z | E CAP. | 470μF 10V | M |
| | C9881 | NCB21HK-102X | C CAP. | 1000pF 50V | K |
| | C9882 | NCB21HK-472X | C CAP. | 4700pF 50V | K |
| | C9883 | QEHR1HM-475Z | E CAP. | 4.7μF 50V | M |
| | C9884 | QEHB1AM-478 | E CAP. | 4700μF 10V | M |
| ⚠ | C9910 | QFZ9036-104 | M.F.CAP. | | |
| ⚠ | C9914 | QFZ9036-104 | M.F.CAPACITOR | 0.1μFAC250V | M |
| ⚠ | C9915 | QCZ9078-222 | C CAP. | | |
| ⚠ | C9916 | QCZ9078-222 | C CAP. | | |
| | C9917 | QFZ0128-474 | M.PP CAPACITOR | 0.47μF 400V ±3% | |
| | C9918 | QEZ0431-227 | E CAP. | | |
| | **TRANSFORMER** | | | | |
| ⚠ | T9801 | CETS099-002A | SE TRANSF. | | |
| ⚠ | T9901 | QQR0818-001 | CHOKE COIL | | |
| | **COIL** | | | | |
| | L9851 | QQLZ018-500 | HEATER CHOKE | | |
| | L9852 | QQR0851-001 | CHOKE COIL | | |
| | L9853-54 | QQLZ018-500 | HEATER CHOKE | | |
| | L9881 | QQR0811-001 | CHOKE COIL | | |
| | **DIODE** | | | | |
| | D9808 | D1FS6-X | CHIP DIODE | | |
| | D9809 | D1FS4-X | CHIP DIODE | | |
| | D9810 | MA3270/H/-X | CHIP ZENER DIODE | | |
| | D9811 | D1FS4-X | CHIP DIODE | | |
| | D9812 | MA3270/H/-X | CHIP ZENER DIODE | | |
| | D9813-14 | D5L60 | SI.DIODE | | |
| | D9815 | MA3120/M/-X | ZENER DIODE | | |
| | D9816-17 | MA111-X | SI.DIODE | | |
| | D9827-28 | MA111-X | SI.DIODE | | |
| | D9851 | DE3S6M-W | CHIP DIODE | | |
| | D9852 | ESAC83M-004 | SI.DIODE | | |
| | D9853-54 | ERC80M-006 | SI.DIODE | | |
| | D9855 | DE3S6M-W | CHIP DIODE | | |
| | D9856-63 | MA111-X | SI.DIODE | | |
| | D9881 | DE5SC3ML-W | SI.DIODE | | |
| ⚠ | D9910 | RBV-406M | BRIDGE DIODE | | |
| | D9911 | D5L60 | SI.DIODE | | |
| | D9916 | EU2A-T3 | SI.DIODE | | |
| | D9917 | D1FS4-X | CHIP DIODE | | |
| | **TRANSISTOR** | | | | |
| ⚠ | Q9815 | 2SK1017MR-01 | F.E.T. | | |
| ⚠ | Q9816 | 2SK1017MR-01 | F.E.T. | | |
| | Q9817 | DTC143XKA-X | DIGI.TRANSISTOR | | |
| | Q9818 | DTC114EKA-X | DIGI.TRANSISTOR | | |
| | Q9819-20 | 2SC2412K/QR/-X | SI.TRANSISTOR | | |
| | Q9821 | 2SA1037AK/QR/-X | SI.TRANSISTOR | | |
| | Q9822 | DTC114YKA-X | DIGI.TRANSISTOR | | |
| | Q9823 | DTC143XKA-X | DIGI.TRANSISTOR | | |
| | Q9836 | 2SC3751/KLM/ | SI.TRANSISTOR | | |
| | Q9881 | 2SA1162/YG/-X | SI.TRANSISTOR | | |
| | Q9882 | 2SA1471/R/ | SI.TRANSISTOR | | |
| | Q9911 | 2SK2196 | F.E.T. | | |
| | **IC** | | | | |
| | IC9801 | NJM431U-X | I.C.(MONO-ANA) | | |
| | IC9802 | TA79005S | I.C.(MONO-ANA) | | |
| ⚠ | IC9803 | TLP721F(GR) | I.C.(PH.COUPLER) | | |
| ⚠ | IC9804 | TLP721F(GR) | I.C.(PH.COUPLER) | | |

| ⚠ | Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|---|
| | **IC** | | | | |
| | IC9807 | AN7915F | I.C. | | |
| | IC9881 | FA7612CN-X | I C | | |
| | **OTHERS** | | | | |
| | K9851 | QQR0867-001 | FERRITE CORE | | |
| ⚠ | LF9910 | CELF001-001J1 | LINE FILTER | | |

## LAMP POWER P.W. BOARD ASS'Y (SXA-9102B)

| ⚠ | Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|---|
| | **RESISTOR** | | | | |
| | R9502 | NRSA02J-272X | MG R | 2.7kΩ 1/10W | J |
| | R9503 | NRSA02J-272X | MG R | 2.7kΩ 1/10W | J |
| | R9504 | NRSA02J-153X | MG R | 15kΩ 1/10W | J |
| | R9505 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9506 | NRSA02J-274X | MG R | 270kΩ 1/10W | J |
| | R9507 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9508 | NRSA02J-272X | MG R | 2.7kΩ 1/10W | J |
| | R9509 | NRSA02J-102X | MG R | 1kΩ 1/10W | J |
| | R9510 | NRSA02J-332X | MG R | 3.3kΩ 1/10W | J |
| | R9511 | NRSA02J-563X | MG R | 56kΩ 1/10W | J |
| | R9512 | NRSA02J-104X | MG R | 100kΩ 1/10W | J |
| | R9513 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9514 | NRSA02J-152X | MG R | 1.5kΩ 1/10W | J |
| | R9515 | NRSA02J-102X | MG R | 1kΩ 1/10W | J |
| | R9516 | NRSA02J-102X | MG R | 1kΩ 1/10W | J |
| | R9517 | NRSA02J-102X | MG R | 1kΩ 1/10W | J |
| | R9518 | NRSA02J-473X | MG R | 47kΩ 1/10W | J |
| | R9519 | NRSA02J-122X | MG R | 1.2kΩ 1/10W | J |
| | R9520 | NRSA02J-102X | MG R | 1kΩ 1/10W | J |
| | R9521 | NRSA02J-272X | MG R | 2.7kΩ 1/10W | J |
| | R9522 | NRSA02J-473X | MG R | 47kΩ 1/10W | J |
| | R9523 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9524 | NRSA02J-472X | MG R | 4.7kΩ 1/10W | J |
| | R9526 | NRSA02J-472X | MG R | 4.7kΩ 1/10W | J |
| | R9527 | NRSA02J-473X | MG R | 47kΩ 1/10W | J |
| | R9528 | NRS12BJ-104X | CHIP R | 100kΩ 1/2W | J |
| | R9529 | NRS12BJ-104X | CHIP R | | |
| | R9530 | CEX41469-001 | UNF RESISTOR | | |
| | R9531 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9532 | NRSA02J-474X | MG R | 470kΩ 1/10W | J |
| | R9533 | NRSA02J-222X | MG R | 2.2kΩ 1/10W | J |
| | R9534 | NRSA02J-152X | MG R | 1.5kΩ 1/10W | J |
| | R9535 | NRSA02J-393X | MG R | 39kΩ 1/10W | J |
| | R9536 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9537 | NRSA02J-222X | MG R | 2.2kΩ 1/10W | J |
| | R9538 | QRE141J-0R0Y | C R | 0.0Ω 1/4W | J |
| | R9539 | QRN141J-0R0Y | C R | 0.0Ω 1/4W | J |
| | R9540 | NRSA02J-0R0X | MG R | 0.0Ω 1/10W | J |
| | R9542 | NRSA02J-0R0X | MG R | 0.0Ω 1/10W | J |
| | R9543 | NRSA02J-102X | MG R | 1kΩ 1/10W | J |
| | R9544 | NRS144J-1R0X | CHIP R | | |
| | R9546 | NRSA02J-473X | MG R | 47kΩ 1/10W | J |
| | R9547 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9548 | NRSA02J-152X | MG R | 1.5kΩ 1/10W | J |
| | R9602-03 | QRZ0205-R01 | M.P.R | 0.01 Ω | |
| | **CAPACITOR** | | | | |
| ⚠ | C9102 | QCZ9078-222 | C CAP. | 2200pF AC250V | M |
| ⚠ | C9103 | QCZ9078-222 | C CAP. | 2200pF AC250V | M |
| ⚠ | C9104 | QCZ9079-472 | C CAP. | 4700pF AC250V | M |
| ⚠ | C9105 | QFZ9040-474 | M.F.CAP. | 0.47μF AC250V | M |
| ⚠ | C9106 | QCZ9078-222 | C CAP. | 2200pF AC250V | M |
| ⚠ | C9107 | QCZ9078-222 | C CAP. | 2200pF AC250V | M |
| | C9201 | NDC21HJ-471X | C CAP. | 470pF 50V | J |
| | C9202 | NDC21HJ-680X | C CAP. | 68pF 50V | J |
| | C9203 | NCB21EK-154X | C CAP. | 0.15μF 25V | K |
| | C9205 | NCF21HZ-334X | CER.CAP. | 0.33μF 50V | Z |
| | C9206 | NCB21HK-331X | C CAP. | 330pF 50V | K |
| | C9207-08 | QEHR1HM-226Z | E CAP. | 22μF 50V | M |
| | C9209 | QEHR1HM-107Z | E CAP. | 100μF 50V | M |
| | C9210 | QEHR1HM-226Z | E CAP. | 22μF 50V | M |
| | C9211 | QFZ0128-474 | M.PP CAP. | 0.47μF 400V ±3% | |
| ⚠ | C9212 | QEZ0430-477 | E CAP. | | |
| | C9213 | NCB21EK-104X | C CAP. | 0.1μF 25V | K |
| | C9214 | NDC21HJ-470X | C CAP. | 47pF 50V | J |
| | C9216 | NDC21HJ-120X | C CAP. | 12pF 50V | J |
| | C9301 | NCF11EZ-105X | C CAP. | 1μF 25V | Z |
| | C9302 | NCF11EZ-105X | C CAP. | 1μF 25V | Z |
| | C9303 | QEHR1VM-227Z | E CAP. | 220μF 35V | M |
| | C9304 | NCB21EK-104X | C CAP. | 0.1μF 25V | K |
| | C9305 | NCB21HK-392X | C CAP. | 3900pF 50V | K |

| ⚠ | Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|---|
| | **CAPACITOR** | | | | |
| | C9306 | NCB21HK-103X | C CAP. | 0.01μF 50V | K |
| | C9307 | NDC21HJ-101X | C CAP. | 100pF 50V | J |
| | C9308 | NDC21HJ-471X | C CAP. | 470pF 50V | J |
| | C9309 | QEHR1HM-106Z | E CAP. | 10μF 50V | M |
| | C9401-02 | NCF11EZ-105X | C CAP. | 1μF 25V | Z |
| | C9403 | QEHR1HM-106Z | E CAP. | 10μF 50V | M |
| ⚠ | C9404 | QCZ9079-222 | C CAP. | | |
| | C9501 | QEHR1CM-227Z | E CAP. | 220μF 16V | M |
| | C9502 | QEHR1HM-106Z | E CAP. | 10μF 50V | M |
| | C9503 | QEHR1HM-105Z | E CAP. | 1μF 50V | M |
| | C9504 | NCB21HK-102X | C CAP. | 1000pF 50V | K |
| | C9505 | QTNC1HM-105Z | E CAP. | | |
| | C9506 | QEHR1CM-107Z | E CAP. | 100μF 16V | M |
| | C9507-08 | NCB21EK-104X | C CAP. | 0.1μF 25V | K |
| | C9509 | QEHR1CM-227Z | E CAP. | 220μF 16V | M |
| | C9510 | NCB21HK-102X | C CAP. | 1000pF 50V | K |
| | C9511 | QCB32HK-561Z | C CAP. | 560pF 500V | K |
| | C9512 | QEHR1HM-226Z | E CAP. | 22μF 50V | M |
| | C9513 | QCB32HK-102Z | C CAP. | 1000pF 500V | K |
| | C9514 | NCB21HK-103X | C CAP. | 0.01μF 50V | K |
| | C9515 | NCB21HK-102X | C CAP. | 1000pF 50V | K |
| | C9516 | QFKB2EJ-334 | MM CAP. | 0.33μF 250V | J |
| | C9517 | NCZ1024-102X | CHIP C CAP. | | |
| | C9602 | QEZ0440-476 | E CAPACITOR | | |
| | C9603 | QCB32HK-102Z | C CAP. | 1000pF 500V | K |
| | **TRANSFORMER** | | | | |
| ⚠ | T9201 | QQR0817-001 | CHOKE COIL | | |
| ⚠ | T9301 | QQR0812-001 | DRIVE TRANSF. | | |
| ⚠ | T9401 | CETS105-001 | SWITCH.TRANSF. | | |
| | **COIL** | | | | |
| ⚠ | L9601 | QQR0850-001 | CHOKE COIL | | |
| | **DIODE** | | | | |
| ⚠ | D9101 | D15XB60 | SI.DIODE | | |
| | D9201 | MA3270/H/-X | CHIP ZENER DIODE | | |
| | D9202-03 | D1FS4-X | CHIP DIODE | | |
| | D9204 | RD18E/B3/-T2 | ZENER DIODE | | |
| | D9205 | EU2A-T3 | SI.DIODE | | |
| | D9206-08 | D1FS4-X | CHIP DIODE | | |
| | D9209 | YG912S6 | SI.DIODE | | |
| | D9210 | MA3051-X | ZENER DIODE | | |
| | D9211 | MA3110/M/-X | ZENER DIODE | | |
| | D9212 | MA3056/H/-X | ZENER DIODE | | |
| | D9301 | D1FS4-X | CHIP DIODE | | |
| | D9302 | MA3120/M/-X | ZENER DIODE | | |
| | D9303-06 | MA111-X | SI.DIODE | | |
| | D9307 | MA3150/M/-X | ZENER DIODE | | |
| | D9308 | MTZJ27B-T2 | ZENER DIODE | | |
| | D9309-10 | MA111-X | SI.DIODE | | |
| | D9401 | D1FS4-X | CHIP DIODE | | |
| | D9402 | MA3270/H/-X | CHIP ZENER DIODE | | |
| | D9403 | DSL60 | SI.DIODE | | |
| | D9404 | D1FS4-X | CHIP DIODE | | |
| | D9405 | MA3270/H/-X | CHIP ZENER DIODE | | |
| | D9406 | DSL60-F1 | SI.DIODE | | |
| | D9407 | D1FS6-X | CHIP DIODE | | |
| | D9501 | D1FL20U-X | SI.DIODE | | |
| | D9502 | MA111-X | SI.DIODE | | |
| | D9503 | SF0R1A42 | THYRISTOR | | |
| | D9504 | MA3051/M/-X | ZENER DIODE | | |
| | D9505 | D1FS6-X | CHIP DIODE | | |
| | D9506 | DSL60 | SI.DIODE | | |
| | D9507 | MTZJ12C-T2 | ZENER DIODE | | |
| | D9508 | MA111-X | SI.DIODE | | |
| | D9509 | MA3180/M/-X | ZENER DIODE | | |
| | D9510 | MA3150/M/-X | ZENER DIODE | | |
| | D9511 | MA111-X | SI.DIODE | | |
| | D9512 | MA3082/M/-X | ZENER DIODE | | |
| | D9513 | MTZJ12C-T2 | ZENER DIODE | | |
| | D9514 | MA3062/M/-X | ZENER DIODE | | |
| | D9515 | MA3056/H/-X | ZENER DIODE | | |
| | D9516-17 | MA111-X | SI.DIODE | | |
| | D9518-19 | 1SS376-X | CHIP DIODE | | |

| ⚠ | Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|---|
| **DIODE** | | | | | |
| | D9601 | FML-33S-F1 | SI.DIODE | | |
| | D9602-03 | D20LC20U | SI.DIODE | | |
| **TRANSISTOR** | | | | | |
| | Q9201 | 2SC4668-W | SI.TRANSISTOR | | |
| | Q9203 | 2SA1795-W | POW TRANSISTOR | | |
| | Q9204 | 2SK2196-F1 | POWER MOS FET | | |
| | Q9205 | 2SA1795-W | POW TRANSISTOR | | |
| | Q9206 | 2SK2196-F1 | POWER MOS FET | | |
| | Q9207 | 2SA1795-W | POW TRANSISTOR | | |
| | Q9208 | 2SK2196-F1 | POWER MOS FET | | |
| | Q9209 | 2SC4668-W | SI.TRANSISTOR | | |
| | Q9210 | 2SA1795-W | POW TRANSISTOR | | |
| | Q9301 | DTC143XKA-X | DIGI.TRANSISTOR | | |
| | Q9302-03 | DTC114EKA-X | DIGI.TRANSISTOR | | |
| | Q9304 | 2SA1162/YG/-X | SI.TRANSISTOR | | |
| | Q9305 | 2SC4668-W | SI.TRANSISTOR | | |
| | Q9306 | 2SA1795-W | POW TRANSISTOR | | |
| | Q9309 | 2SC3751/KLM/ | SI.TRANSISTOR | | |
| | Q9310 | DTC124EKA-X | DIGI.TRANSISTOR | | |
| | Q9311 | 2SC2412K/QR/-X | SI.TRANSISTOR | | |
| ⚠ | Q9401 | 2SK1017MR-01 | F.E.T. | | |
| ⚠ | Q9402 | 2SK1017MR-01 | F.E.T. | | |
| | Q9501 | DTC123YKA-X | DIGI.TRANSISTOR | | |
| | Q9502 | DTC124EKA-X | DIGI.TRANSISTOR | | |
| | Q9503-04 | 2SA1037AK/QR/-X | SI.TRANSISTOR | | |
| | Q9505 | 2SC2412K/QR/-X | SI.TRANSISTOR | | |
| | Q9506 | DTC124EKA-X | DIGI.TRANSISTOR | | |
| | Q9507 | DTC143XKA-X | DIGI.TRANSISTOR | | |
| | Q9508 | 2SC4061K/NP/-X | SI.TRANSISTOR | | |
| | Q9509 | 2SC2412K/QR/-X | SI.TRANSISTOR | | |
| | Q9510 | IRF9630 | F.E.T. | | |
| | Q9511 | DTC143XKA-X | DIGI.TRANSISTOR | | |
| | Q9512 | 2SC2412K/QR/-X | SI.TRANSISTOR | | |
| **IC** | | | | | |
| | IC9201 | FA5331M | I.C.(MONO-ANA) | | |
| | IC9301 | UC3843BD1-X | I.C.(MONO-ANA) | | |
| ⚠ | IC9302 | TLP721F(GR) | I.C.(PH.COUPLER) | | |
| ⚠ | IC9303 | TLP721F(GR) | I.C.(PH.COUPLER) | | |
| | IC9304 | TL072CD-X | I.C.(MONO-ANA) | | |
| | IC9501 | UPC358G-W | I.C.(MONO-ANA) | | |
| | IC9502 | NJM431U-X | I.C.(MONO-ANA) | | |
| | IC9503 | UPC358G-W | I.C.(MONO-ANA) | | |
| | IC9504 | NJM431U-X | I.C.(MONO-ANA) | | |
| **OTHERS** | | | | | |
| | | CE41666-002A | RADIATION SEET | | |
| | | LC40345-001A | SHEET | | |
| | | QQR0867-001 | FERRITE CORE | | x2 |

## FAN POWER P.W.BOARD ASS'Y (SXA-9201B)

| ⚠ | Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|---|
| **RESISTOR** | | | | | |
| | R9871 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9872 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9873-75 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9881 | NRSA02J-223X | MG R | 22kΩ 1/10W | J |
| | R9882 | NRSA02J-104X | MG R | 100kΩ 1/10W | J |
| | R9883 | NRSA02J-683X | MG R | 68kΩ 1/10W | J |
| | R9884 | NRSA02J-0R0X | MG R | 0.0Ω 1/10W | J |
| | R9885 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9886 | NRSA02J-332X | MG R | 3.3kΩ 1/10W | J |
| | R9887 | NRSA02J-391X | MG R | 390Ω 1/10W | J |
| | R9888 | NRSA02J-470X | MG R | 47Ω 1/10W | J |
| | R9889 | NRSA02J-182X | MG R | 1.8kΩ 1/10W | J |
| | R9890 | NRSA02J-221X | MG R | 220Ω 1/10W | J |
| | R9891 | NRSA02J-223X | MG R | 22kΩ 1/10W | J |
| | R9892 | NRSA02J-333X | MG R | 33kΩ 1/10W | J |
| | R9893 | NRSA02J-332X | MG R | 3.3kΩ 1/10W | J |
| | R9894 | NRSA02J-391X | MG R | 390Ω 1/10W | J |
| | R9895 | NRSA02J-470X | MG R | 47Ω 1/10W | J |
| | R9896 | NRSA02J-182X | MG R | 1.8kΩ 1/10W | J |
| | R9897 | NRSA02J-221X | MG R | 220Ω 1/10W | J |
| | R9898 | NRSA02J-223X | MG R | 22kΩ 1/10W | J |
| | R9899 | NRSA02J-333X | MG R | 33kΩ 1/10W | J |
| | R9900 | NRSA02J-332X | MG R | 3.3kΩ 1/10W | J |
| | R9901 | NRSA02J-391X | MG R | 390Ω 1/10W | J |
| | R9902 | NRSA02J-470X | MG R | 47Ω 1/10W | J |
| | R9903 | NRSA02J-182X | MG R | 1.8kΩ 1/10W | J |
| | R9904 | NRSA02J-221X | MG R | 220Ω 1/10W | J |
| | R9905 | NRSA02J-223X | MG R | 22kΩ 1/10W | J |
| | R9906 | NRSA02J-333X | MG R | 33kΩ 1/10W | J |
| | R9907 | NRSA02J-103X | MG R | 10kΩ 1/10W | J |
| | R9914 | NRSA02J-101X | MG R | 100Ω 1/10W | J |
| | R9915 | NRSA02J-0R0X | MG R | 0.0Ω 1/10W | J |
| **CAPACITOR** | | | | | |
| | C9822-23 | NCB21HK-104X | CHIP CAP. | 0.1μF 50V | K |
| | C9862-63 | QEHR1CM-107Z | E CAP. | 100μF 16V | M |
| | C9870-71 | QEHR1CM-107Z | E CAP. | 100μF 16V | M |
| | C9872 | QEHR1EM-227Z | E CAP. | 220μF 25V | M |
| | C9873-76 | QETN1HM-106Z | E CAP. | 10μF 50V | M |
| | C9877 | QETN1AM-107Z | E CAP. | 100μF 10V | M |
| **DIODE** | | | | | |
| | D9821-25 | MA111-X | SI.DIODE | | |
| **TRANSISTOR** | | | | | |
| | Q9801-06 | 2SC2412K/QR/-X | SI.TRANSISTOR | | |
| **IC** | | | | | |
| | IC9805 | PQ30RV11 | I.C.(MONO-ANA) | | |
| | IC9808-09 | PQ30RV11 | I.C.(MONO-ANA) | | |

## IGNITER P.W.BOARD ASS'Y (SXA-9302B)

| ⚠ | Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|---|
| | **RESISTOR** | | | | |
| | R9101 | QRE122J-102 | C R | 1kΩ 1/2W J | |
| | R9102-03 | QRE122J-153 | C R | 15kΩ 1/2W J | |
| | R9604 | CEX41454-001 | FUSIBLE RESISTOR | | |
| | **CAPACITOR** | | | | |
| | C9101 | QFKB2EJ-334 | MM CAP. | 0.33μF 250V J | |
| | C9102 | QCZ0335-681 | C CAP. | 680pF | |
| | C9103-07 | QCZ0335-202 | C CAP. | 2000pF | |
| | C9110-11 | QCB32HK-222 | C CAP. | 2200pF 500V K | |
| | C9112 | QCB32HK-471Z | C CAP. | 470pF 500V K | |
| | C9603 | QEZ0435-477 | E CAP. | | |
| | C9604 | QFZ0119-105 | M.PP CAPACITOR | 1μF 200V ±3% | |
| | **TRANSFORMER** | | | | |
| ⚠ | T9101 | QQR0819-001 | PULSE TRANSF. | | |
| ⚠ | T9102 | QQR0852-001 | PULSE TRANSF. | | |
| | **DIODE** | | | | |
| | D9101 | K1V12-F1P15 | THYRISTOR | | |
| | D9102-03 | HVR-1X-40B | SI.DIODE | | |
| | D9605-06 | FML-33S-F1 | SI.DIODE | | |
| | **OTHERS** | | | | |
| | CN90MI | QNZ0127-001 | A/V TERMINAL | | |
| ⚠ | RY9601 | QSK0080-001 | RELAY | | |
| | SG9101-02 | SSG3X-1 | ARRESTER | | |

## MAIN LINE FILTER P.W. BOARD ASS'Y (SXA-9502B)

| ⚠ | Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|---|
| | **RESISTOR** | | | | |
| ⚠ | R9902 | QRZ0057-825 | C R | 8.2MΩ 1W J | |
| ⚠ | R9903 | QRZ0121-4R7 | UNF.WW.RESISTOR | 4.7 Ω 5W J | |
| | R9910 | CEX41470-001 | UNF RESISTOR | | |
| | R9911-12 | QRE141J-103Y | C R | 10kΩ 1/4W J | |
| | **CAPACITOR** | | | | |
| ⚠ | C9904 | QCZ9078-222 | C CAP. | 2200pFAC250V K | |
| ⚠ | C9905 | QCZ9078-222 | C CAP. | 2200pFAC250V K | |
| ⚠ | C9906 | QCZ9079-472 | C CAP. | 4700pFAC250V K | |
| ⚠ | C9907 | QFZ9040-474 | M.F.CAPACITOR | 0.4μFAC275V M | |
| ⚠ | C9909 | QFZ9040-474 | M.F.CAPACITOR | 0.4μFAC275V M | |
| ⚠ | C9910 | QFZ9036-104 | M.F.CAP. | 0.1μFAC250V M | |
| | C9911-12 | QEHC1EM-476Z | E CAP. | 47μF 25V M | |
| | **DIODE** | | | | |
| | D9910 | 1SS133-T2 | SI.DIODE | | |
| | **TRANSISTOR** | | | | |
| | Q9910 | 2SC3311A/QR/-T | SI.TRANSISTOR | | |
| | **OTHERS** | | | | |
| ⚠ | LF9902 | QQR0810-001 | LINE FILTER | | |
| ⚠ | LF9903 | QQR0810-001 | LINE FILTER | | |
| ⚠ | RY9910 | QSK0083-001 | RELAY | | |

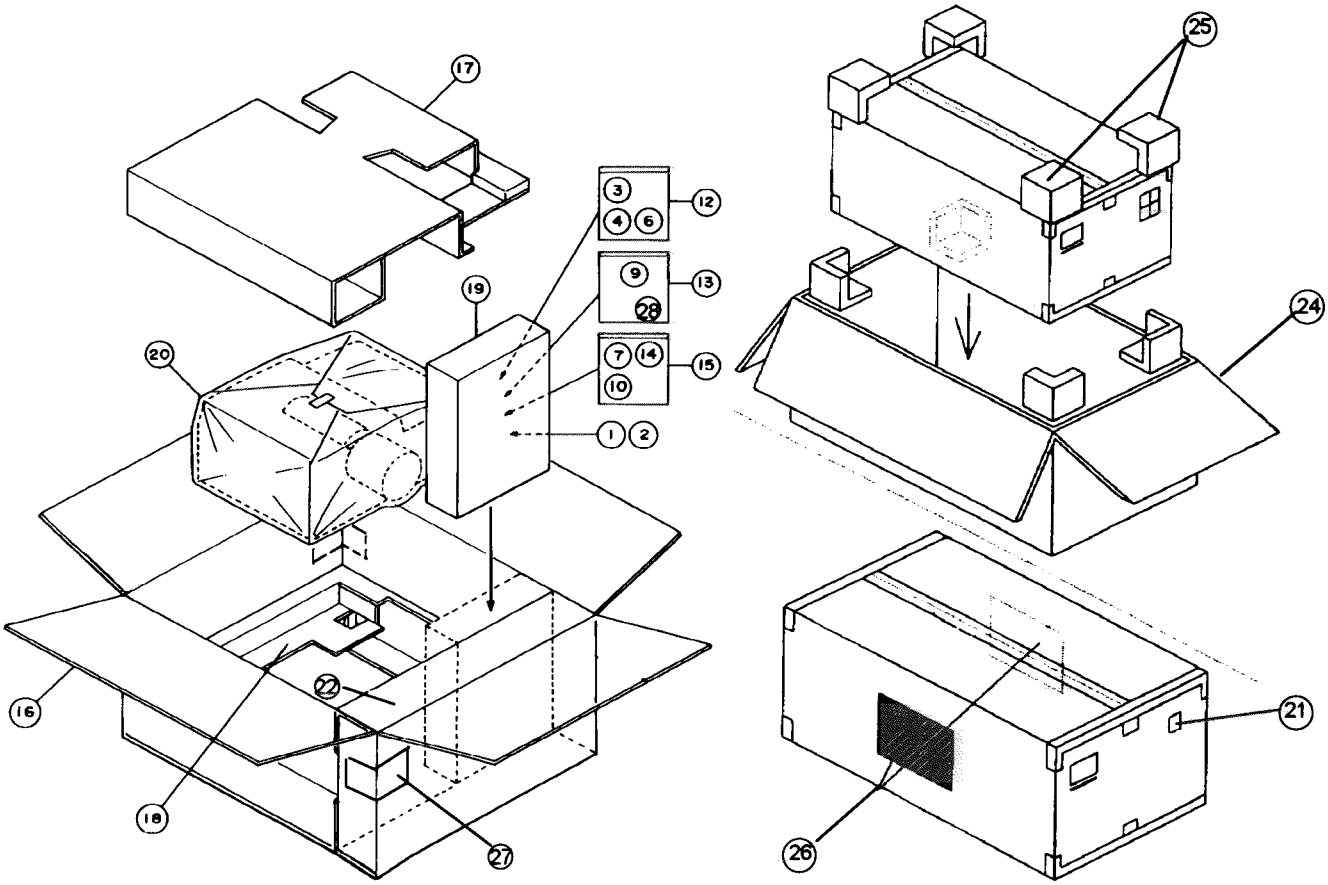
## SUB LINE FILTER P.W.BOARD ASS'Y (SXA-9512B)

| ⚠ | Symbol No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|---|
| | **RESISTOR** | | | | |
| ⚠ | R9901 | QRZ0111-274 | C R | | |
| | **CAPACITOR** | | | | |
| ⚠ | C9901 | QFZ9040-105 | M.M.CAP. | 1μFAC275V M | |
| ⚠ | C9903 | QFZ9036-104 | M.F.CAP. | 0.1μFAC250V M | |
| | **OTHERS** | | | | |
| | | CEMG002-001Z | FUSE CLIP | x2 | |
| ⚠ | F9901 | QMFS1D2-6R3J1 | FUSE | 6.3 A | |
| ⚠ | LF9901 | QQR0824-001 | FILTER | | |
| ⚠ | VA9901 | ERZV10V621CS | VARISTOR | | |

# REMOTE CONTROL UNIT PARTS LIST (RM-M10SG)

| ⚠ | Ref.No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|---|
| | | 103RRS-018-09R | BATTERY COVER | | |

# PACKING




# PACKING PARTS LIST

| ⚠ | Ref.No. | Part No. | Part Name | Description | Local |
|---|---|---|---|---|---|
| | 1 | RM-M10SG | REMOCON UNIT | | |
| | 2 | QAM0104-002 | PC CABLE | | |
| | 3 | QAM0081-001 | CABLE | | |
| | 4 | QAM0072-001 | A/V CABLE | | |
| | 6 | QAM0102-001 | ADAPTOR PLUG | | |
| ⚠ | 7 | QMPL050-250-K | POWER CORD | (DLA-S10E) | |
| ⚠ | 7 | QMPP070-250-K | POWER CORD | (DLA-S10EK) | |
| ⚠ | 9 | LCT0221-001A | INST BOOK | | |
| | 10 | CEAA001-001 | ADAPTOR PLUG | | |
| | 12 | QPGA015-03005 | POLY BAG | | |
| | 13 | CP30975-001 | POLY BAG | | |
| | 14 | ---------- | BATTERY | | |
| | 15 | QPGA015-03005 | POLY BAG | | |
| | 16 | LC20050-017A | PACKING CASE(S10 | | |
| | 17 | LC30228-001B | TOP CUSHION | | |
| | 18 | LC30229-001B | BOTTOM CUSHION | | |
| | 19 | LC30401-001B | ACCESSORY BOX | | |
| | 20 | LC30230-001A | SET COVER | | |
| | 21 | LC30407-018A | PRINT SPEC | | |
| | 22 | LC30565-001A | SPASER | | |
| | 24 | LC20050-018A | PACKING CASE(DOU | | |
| | 25 | CP30177-001 | CORNER PIECE | ×8 | |
| | 26 | LC30445-003A | CARTON LABEL | ×2 (DLA-S10E) | |
| | 26 | LC30445-004A | CARTON LABEL | ×2 (DLA-S10EK) | |
| | 27 | CPX30097-003 | CARTON LABEL | ×2 (DLA-S10E) | |
| | 27 | CPX30097-004 | CARTON LABEL | ×2 (DLA-S10EK) | |
| | 28 | LC30577-001A | CAUTION SHEET | | |

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DLA-S10E
DLA-S10EK

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